# **Everhome Suites - Georgetown**

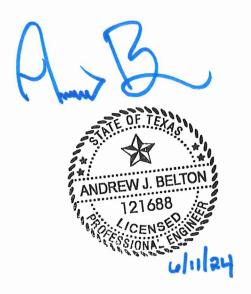
**Water Pollution Abatement Plan** 

June 2024



# **Everhome Suites - Georgetown**

#### **Water Pollution Abatement Plan**



June 2024





06/12/2024

Ms. Lillian Butler Texas Commission on Environmental Quality (TCEQ) Region 11 12100 Park 35 Circle, Bldg A, Rm 179 Austin, Texas 78753

Re: Everhome Suites - Georgetown

Water Pollution Abatement Plan

Dear Ms. Butler:

Please find included herein the Everhome Suites - Georgetown Water Pollution Abatement Plan. This Water Pollution Abatement Plan has been prepared in accordance with the regulations of the Texas Administrative Code (30 TAC 213) and current policies for development over the Edwards Aquifer Recharge Zone.

This Water Pollution Abatement Plan applies to an approximate 2.430-acre legal limit and 2.56-acre site as identified by the project limits. Please review the plan information for the items it is intended to address. If acceptable, please provide a written approval of the plan in order that construction may begin at the earliest opportunity.

Appropriate review fees (\$4,000) and fee application are included. If you have questions or require additional information, please do not hesitate to contact me at your earliest convenience.

Sincerely,

Pape-Dawson Consulting Engineers, LLC

Andrew Belton, P.E. Vice President

Attachments

P:\133\97\00\Word\Reports\WPAP\2024 - WPAP Cover Letter.docx

# EDWARDS AQUIFER APPLICATION COVER PAGE (TCEQ-20705)

#### **Texas Commission on Environmental Quality**

#### **Edwards Aquifer Application Cover Page**

#### **Our Review of Your Application**

The Edwards Aquifer Program staff conducts an administrative and technical review of all applications. The turnaround time for administrative review can be up to 30 days as outlined in 30 TAC 213.4(e). Generally administrative completeness is determined during the intake meeting or within a few days of receipt. The turnaround time for technical review of an administratively complete Edwards Aquifer application is 90 days as outlined in 30 TAC 213.4(e). Please know that the review and approval time is directly impacted by the quality and completeness of the initial application that is received. In order to conduct a timely review, it is imperative that the information provided in an Edwards Aquifer application include final plans, be accurate, complete, and in compliance with 30 TAC 213.

#### **Administrative Review**

- Edwards Aquifer applications must be deemed administratively complete before a technical review can begin. To be considered administratively complete, the application must contain completed forms and attachments, provide the requested information, and meet all the site plan requirements. The submitted application and plan sheets should be final plans. Please submit one full-size set of plan sheets with the original application, and half-size sets with the additional copies.
  - To ensure that all applicable documents are included in the application, the program has developed tools to guide you and web pages to provide all forms, checklists, and guidance. Please visit the below website for assistance: <a href="http://www.tceq.texas.gov/field/eapp">http://www.tceq.texas.gov/field/eapp</a>.
- 2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.
- 3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.
- 4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.
  - An appointment should be made to resubmit the application. The application is re-examined to ensure all deficiencies are resolved. The application will only be deemed administratively complete when all administrative deficiencies are addressed.
- 5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.
- 6. If the geologic assessment was completed before October 1, 2004 and the site contains "possibly sensitive" features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

#### **Technical Review**

- 1. When an application is deemed administratively complete, the technical review period begins. The regional office will distribute copies of the application to the identified affected city, county, and groundwater conservation district whose jurisdiction includes the subject site. These entities and the public have 30 days to provide comments on the application to the regional office. All comments received are reviewed by TCEQ.
- 2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be

- clearly marked, features identified in the geologic assessment should be flagged, roadways marked and the alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.
- 3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or will be denied. Please note that because the technical review is underway, whether the application is withdrawn or denied **the application fee will be forfeited**.
- 4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

#### **Mid-Review Modifications**

It is important to have final site plans prior to beginning the permitting process with TCEQ to avoid delays.

Occasionally, circumstances arise where you may have significant design and/or site plan changes after your Edwards Aquifer application has been deemed administratively complete by TCEQ. This is considered a "Mid-Review Modification". Mid-Review Modifications may require redistribution of an application that includes the proposed modifications for public comment.

If you are proposing a Mid-Review Modification, two options are available:

- If the technical review has begun your application can be denied/withdrawn, your fees will be forfeited, and the plan will have to be resubmitted.
- TCEQ can continue the technical review of the application as it was submitted, and a modification application can be submitted at a later time.

If the application is denied/withdrawn, the resubmitted application will be subject to the administrative and technical review processes and will be treated as a new application. The application will be redistributed to the affected jurisdictions.

Please contact the regional office if you have questions. If your project is located in Williamson, Travis, or Hays County, contact TCEQ's Austin Regional Office at 512-339-2929. If your project is in Comal, Bexar, Medina, Uvalde, or Kinney County, contact TCEQ's San Antonio Regional Office at 210-490-3096

Please fill out all required fields below and submit with your application.

1. Regulated Entity N	ne Suite own	2. Regulated Entity No.:							
3. Customer Name: C				4. Cu	4. Customer No.:				
5. Project Type: (Please circle/check one)	New	Modification			Extension		Exception		
6. Plan Type: (Please circle/check one)	WPAP CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures	
7. Land Use: (Please circle/check one)	Residential (	Non-r	Non-residential			8. Sit	e (acres):	2.430	
9. Application Fee:	\$4,000	10. P	ermai	nent l	BMP(s	s):	Aqua-Filter		
11. SCS (Linear Ft.):		12. A	ST/US	ST (N	o. Tar	ıks):			
13. County:	Williamson	14. W	laters	hed:			Granger Lake - San Gabriel River		

#### **Application Distribution**

Instructions: Use the table below to determine the number of applications required. One original and one copy of the application, plus additional copies (as needed) for each affected incorporated city, county, and groundwater conservation district are required. Linear projects or large projects, which cross into multiple jurisdictions, can require additional copies. Refer to the "Texas Groundwater Conservation Districts within the EAPP Boundaries" map found at:

http://www.tceq.texas.gov/assets/public/compliance/field\_ops/eapp/EAPP%20GWCD%20map.pdf

For more detailed boundaries, please contact the conservation district directly.

Austin Region									
County:	Hays	Travis	Williamson						
Original (1 req.)	_	_	<u> </u>						
Region (1 req.)	_	_	<u>~</u>						
County(ies)	_	_	<u> </u>						
Groundwater Conservation District(s)	Edwards Aquifer AuthorityBarton Springs/ Edwards AquiferHays TrinityPlum Creek	Barton Springs/ Edwards Aquifer	NA						
City(ies) Jurisdiction	AustinBudaDripping SpringsKyleMountain CitySan MarcosWimberleyWoodcreek	AustinBee CavePflugervilleRollingwoodRound RockSunset ValleyWest Lake Hills	AustinCedar ParkFlorenceGeorgetownJerrellLeanderLiberty HillPflugervilleRound Rock						

	San Antonio Region										
County:	Bexar	Comal	Kinney	Medina	Uvalde						
Original (1 req.)	_	_		_	_						
Region (1 req.)		_			_						
County(ies)			=								
Groundwater Conservation District(s)	Edwards Aquifer Authority Trinity-Glen Rose	Edwards Aquifer Authority	Kinney	EAA Medina	EAA Uvalde						
City(ies) Jurisdiction	Castle HillsFair Oaks RanchHelotesHill Country VillageHollywood ParkSan Antonio (SAWS)Shavano Park	BulverdeFair Oaks RanchGarden RidgeNew BraunfelsSchertz	NA	San Antonio ETJ (SAWS)	NA						

I certify that to the best of my knowledge, that the a application is hereby submitted to TCEQ for admin	
Andrew Belton, P.E.	
Print Name of Oustomer/Authorized Agent	
	Man particular distriction (1)
	06/12/2024
Signature of Customer/Authorized Agent	Date

**FOR TCEQ INTERNAL USE ONLY**								
Date(s)Reviewed:		Date Administratively Complete:						
Received From:		Correct N	Tumber of Copies:	•				
Received By:		Distribut	ion Date:					
EAPP File Number:		Complex:						
Admin. Review(s) (No.):		No. AR R						
Delinquent Fees (Y/N):		Review T	ime Spent:					
Lat./Long. Verified:		SOS Cust	omer Verification:					
Agent Authorization Complete/Notarized (Y/N):		Fee	Payable to TCEQ (Y/N):					
Core Data Form Complete (Y/N):		Check:	Signed (Y/N):					
Core Data Form Incomplete Nos.:			Less than 90 days old (Y/N):					

# GENERAL INFORMATION FORM (TCEQ-0587)

#### **General Information Form**

**Texas Commission on Environmental Quality** 

Print Name of Customer/Agent: Andrew Belton, P.F.

For Regulated Activities on the Edwards Aquifer Recharge and Transition Zones and Relating to 30 TAC §213.4(b) & §213.5(b)(2)(A), (B) Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

#### Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **General Information Form** is hereby submitted for TCEQ review. The application was prepared by:

	The Halle of Gustoffler, Agent Parallew Belton, The	
Da	Date: Culay	
	Signature of Customer/Agent:  Project Information	
	<del>-</del>	
1.	1. Regulated Entity Name: <u>Everhome Suites - Georgetown</u>	
2.	2. County: <u>Williamson</u>	
3.	3. Stream Basin: <u>Granger Lake - San Gabriel River</u>	
4.	4. Groundwater Conservation District (If applicable): N/A	
5.	5. Edwards Aquifer Zone:	
	Recharge Zone Transition Zone	
6.	6. Plan Type:	
	WPAP □ AST   □ SCS □ UST   □ Modification □ Exc	

7.	Customer (Applicant):	
	Contact Person: Joshua Baran, P.E. Entity: Clay 35, LLC Mailing Address: 1625 Williams Drive City, State: Georgetown, TX Telephone: 521-779-7414 Email Address: josh@seven10dev.com	Zip: <u>78628</u> FAX:
8.	Agent/Representative (If any):	
	Contact Person: Andrew Belton, P.E. Entity: Pape-Dawson Cosulting Engineers, LLC Mailing Address: 2000 NW Loop 410 City, State: San Antonio, TX Telephone: (210) 375-9000 Email Address: ABelton@pape-dawson.com	Zip: <u>78215</u> FAX:
9.	Project Location:	
	<ul> <li>☐ The project site is located inside the city ling.</li> <li>☐ The project site is located outside the city ling.</li> <li>☐ Jurisdiction of</li> <li>☐ The project site is not located within any city.</li> </ul>	imits but inside the ETJ (extra-territorial
10.	The location of the project site is described detail and clarity so that the TCEQ's Region boundaries for a field investigation.	below. The description provides sufficient hal staff can easily locate the project and site
	and take exit 262 toward Farm to Mark Proceed along IH-35 frontage rd N for a Williams Dr. Travel approximatley 0.2 r	north on IH-35 for approximatley 16.8 miles set Rd 2338/Granger/Farm to Market Rd 971. approxmatley 1.1 miles and turn left onto niles and turn right onto Park Ln. Travel for onto Clay St, the site is located northwest of
11.		nowing directions to and the location of the n and site boundaries are clearly shown on
12.	Attachment B - USGS / Edwards Recharge USGS Quadrangle Map (Scale: 1" = 2000') of The map(s) clearly show:	<b>Zone Map</b> . A copy of the official 7 ½ minute of the Edwards Recharge Zone is attached.
	<ul> <li>Project site boundaries.</li> <li>USGS Quadrangle Name(s).</li> <li>Boundaries of the Recharge Zone (and</li> <li>Drainage path from the project site to the secondaries.</li> </ul>	

13. 🔀	The TCEQ must be able to inspect the project site or the application will be returned. Sufficient survey staking is provided on the project to allow TCEQ regional staff to locate the boundaries and alignment of the regulated activities and the geologic or manmade features noted in the Geologic Assessment.
$\geq$	Survey staking will be completed by this date: when advised of TCEQ site visit.
14. 🔀	Attachment C – Project Description. Attached at the end of this form is a detailed narrative description of the proposed project. The project description is consistent throughout the application and contains, at a minimum, the following details:
	<ul> <li>Area of the site</li> <li>○ Offsite areas</li> <li>○ Impervious cover</li> <li>○ Permanent BMP(s)</li> <li>○ Proposed site use</li> <li>○ Site history</li> <li>○ Previous development</li> <li>○ Area(s) to be demolished</li> </ul>
15. Ex	sisting project site conditions are noted below:
	Existing commercial site Existing industrial site Existing residential site Existing paved and/or unpaved roads Undeveloped (Cleared) Undeveloped (Undisturbed/Uncleared) Other:
Pro	hibited Activities
16. 🗵	I am aware that the following activities are prohibited on the Recharge Zone and are not proposed for this project:
	(1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);

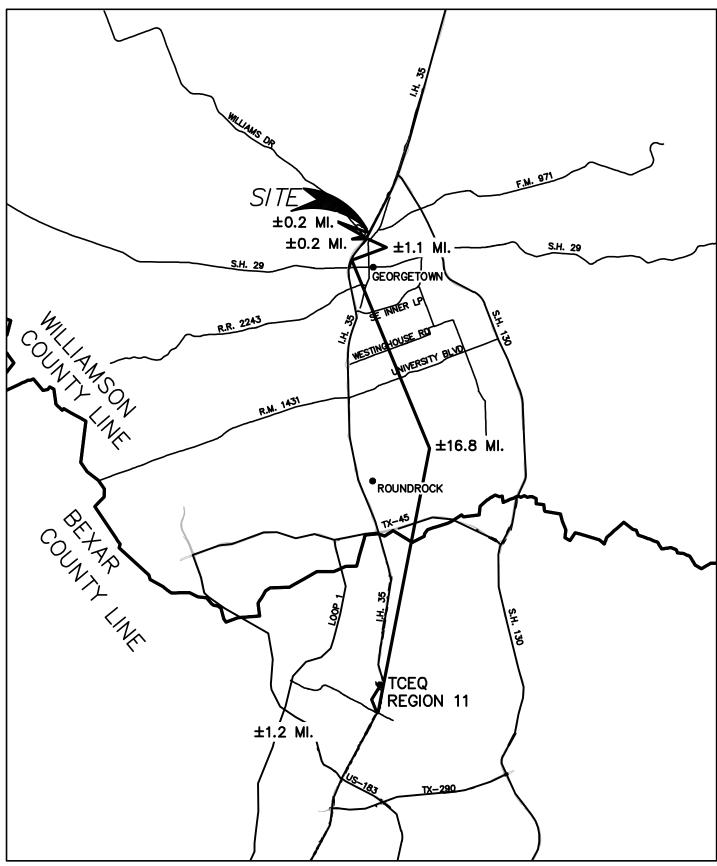
- (2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;
- (3) Land disposal of Class I wastes, as defined in 30 TAC §335.1;
- (4) The use of sewage holding tanks as parts of organized collection systems; and
- (5) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).
- (6) New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.

- 17. | I am aware that the following activities are prohibited on the Transition Zone and are not proposed for this project: (1) Waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control); (2) Land disposal of Class I wastes, as defined in 30 TAC §335.1; and (3) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title. Administrative Information 18. The fee for the plan(s) is based on: Killing For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur. For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines. For a UST Facility Plan or Modification or an AST Facility Plan or Modification, the total number of tanks or piping systems. A request for an exception to any substantive portion of the regulations related to the protection of water quality. A request for an extension to a previously approved plan. 19. Application fees are due and payable at the time the application is filed. If the correct fee is not submitted, the TCEQ is not required to consider the application until the correct fee is submitted. Both the fee and the Edwards Aquifer Fee Form have been sent to the Commission's: X TCEQ cashier Austin Regional Office (for projects in Hays, Travis, and Williamson Counties) San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and **Uvalde Counties**)
- 20. Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.
- 21. No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director.

# **ATTACHMENT A**

## **EVERHOME SUITES - GEORGETOWN**Water Pollution Abatement Plan





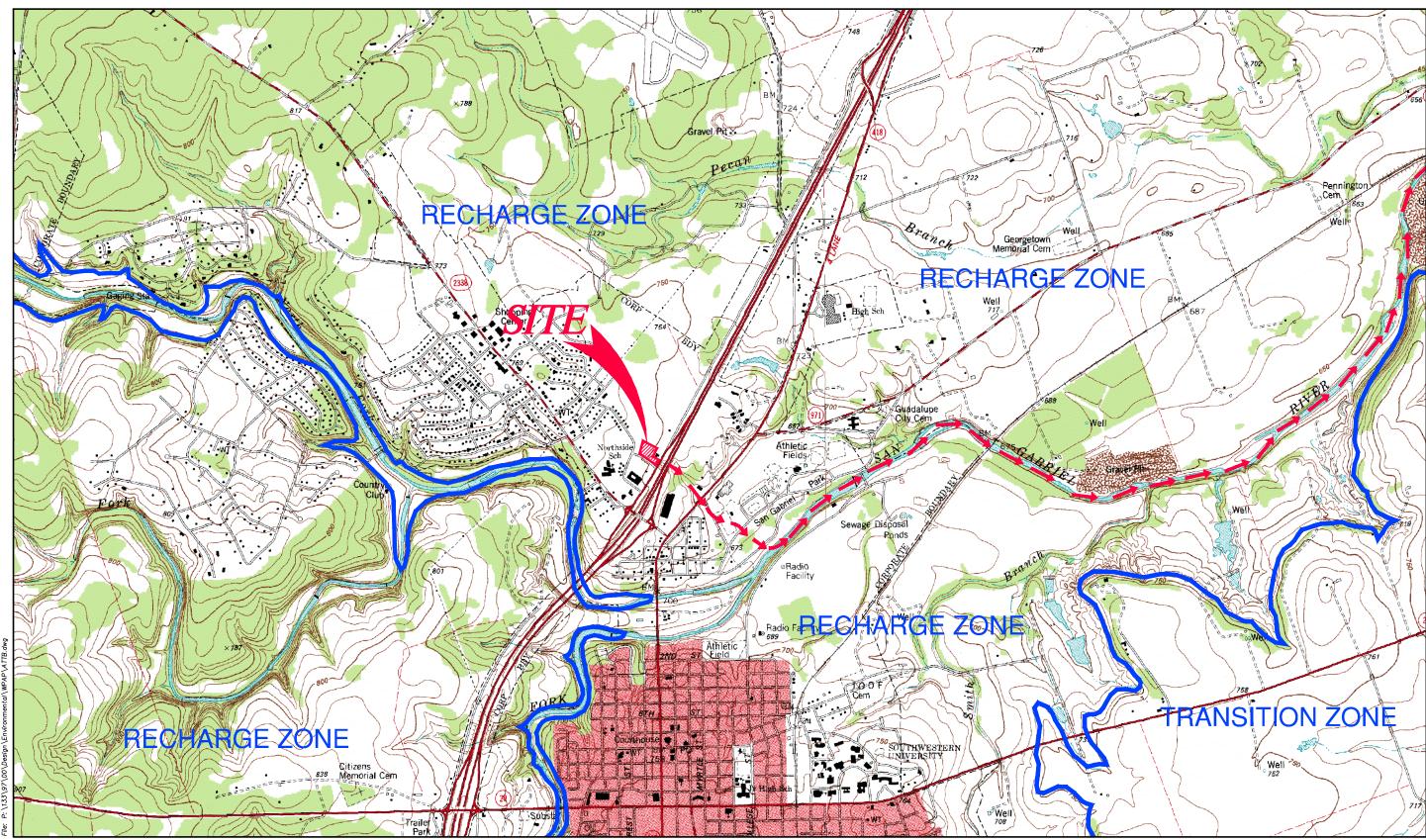
Pape-Dawson Consulting Engineers, LLC.

ATTACHMENT A Road Map

# **ATTACHMENT B**

# **EVERHOME SUITES - GEORGETOWN**Water Pollution Abatement Plan





GENERAL LOCATION MAP - GEORGETOWN, TX QUAD; DRAINAGE FLOW

USGS/EDWARDS RECHARGE ZONE MAP Sheet 1 of 1 ATTACHMENT B

# **ATTACHMENT C**

### EVERHOME SUITES - GEORGETOWN Water Pollution Abatement Plan

#### Attachment C - Project Description

Everhome Suites - Georgetown Water Pollution Abatement Plan (WPAP) proposes the construction of a commercial building with associated parking on approximately 2.43 acres within the City of Georgetown, in Williamson County, Texas. The site is located approximately northwest of the Clay St and S IH-35 Service Rd intersection. The site is bound by the Clay St Right-of-Way (ROW) to the south, single-family residential property to the west, commercial property to the north, and IH-35 undeveloped property to the east. The site is undeveloped and lies within the Granger Lake – San Gabriel watershed and does not contain 100-year floodplain. There were no naturally occurring sensitive geological features identified in the Geologic Assessment.

This WPAP proposes additional clearing, grading, excavation, installation of utilities and drainage improvements, construction of one (1) Aqua-Filter® filter basin, one (1) four-story building and associated parking. The proposed Permanent Best Management Practices (PBMPs) for stormwater treatment is one (1) Aqua Filter designed in accordance with the TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) to remove 80% of the increase in Total Suspended Solids (TSS) from the site. Approximately 1.68 acres of impervious cover, or 69% of the 2.56 acre project limits, are proposed for construction in this WPAP. In Watershed "A," approximately 1.60 acres of impervious cover from the building, parking, and drives will be treated by the basin; leaving 0.08 from the drives as overtreatment from watershed "B." Please see the Treatment Summary table attached with this application. All PBMPs have been designed in accordance with the Texas Commission on Environmental Quality's (TCEQ) Technical Guidance Manual (TGM) RG-348 (2005) to remove 80% of the increase in Total Suspended Solids (TSS) from the site. Due to the City of Georgetown requirements, the system has been designed to remove 85% of the increase in TSS.

Potable water service is to be provided by the City of Georgetown. The proposed development will generate approximately 16,675 gallons per day (average flow) of domestic wastewater based on the assumption of 145 gpd for per unit (145 gpd/room \* 115 = 16,675 gpd).

Wastewater will be disposed of by conveyance to the existing City of Georgetown Water Treatment Plant operated by the City of Georgetown.



# GEOLOGIC ASSESSMENT FORM (TCEQ-0585)

#### **Geologic Assessment**

**Texas Commission on Environmental Quality** 

For Regulated Activities on The Edwards Aquifer Recharge/transition Zones and Relating to 30 TAC §213.5(b)(3), Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

#### Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

	nt Name of Geologist: <u>Heather Beatty,</u>	Telephone: <u>512.470.4013</u>
<u>PG</u>		Fax:
Dat	te: <u>16 April 2021</u>	
	oresenting: <u>Cambrian Environmental (TBPG # 5</u> sistration number)	
Sig	<b>//★</b> /	OF TEXAS
	* HEATHE	
Reg	guiated Entity Name: 301 N IH 35 - ルペン	1350 ENSED COM
Pr	oject Information	X GEO3
1.	Date(s) Geologic Assessment was performed:	26 March 2021
2.	Type of Project:	
		☐ AST ☐ UST
3.	Location of Project:	
	Recharge Zone Transition Zone Contributing Zone within the Transition Zo	one

4.			ologic Assessmen Table) is attached.	-	ed Geologic Assessment Table
	Hydrologi 55, Apper	c Soil Gro ndix A, Soi ct site, sho <b>Inits, Inf</b>	ups* (Urban Hydr I Conservation Selow each soil type of the constitution	ology for Small W rvice, 1986). If the on the site Geolog	e below and uses the SCS ratersheds, Technical Release No. ere is more than one soil type on gic Map or a separate soils map.  Group Definitions (Abbreviated)
•					Soils having a high infiltration
	Soil Name	Group*	Thickness(feet)	В.	rate when thoroughly wetted. Soils having a moderate
(	Georgetown (GsB)	D	<3.5		infiltration rate when thoroughly wetted.
				C.	Soils having a slow infiltration rate when thoroughly wetted.
				D.	Soils having a very slow
					infiltration rate when thoroughly
					wetted.
<ol> <li>7.</li> </ol>	members top of the the stratig	, and thick stratigra graphic co	knesses is attache phic column. Othellumn.	d. The outcroppin erwise, the upper	column showing formations, og unit, if present, should be at the most unit should be at the top of of the site specific geology
	potential	for fluid n		=	sment Table, a discussion of the stratigraphy, structure(s), and
8.			e Geologic Map(s Plan. The minimu	-	ic Map must be the same scale as )'
	Site Geolo	ogic Map S	n Scale: 1" = <u>40</u> ' Scale: 1" = <u>125</u> ' e (if more than 1 s	oil type): 1" = <u>125</u>	
9.	Method of co	llecting p	ositional data:		
	_	_	System (GPS) tech lease describe me	= :	ection:
10.	The proje	ct site and	d boundaries are c	learly shown and	labeled on the Site Geologic Map.
			its are shown and		
	~ 7 2 α. 1 α σ c B (	- 5.00.0 011			2 -£ 2

12.	. Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.
	Geologic or manmade features were not discovered on the project site during the field investigation.
13	. $igotimes$ The Recharge Zone boundary is shown and labeled, if appropriate.
14	. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.
	There are (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)  The wells are not in use and have been properly abandoned.  The wells are not in use and will be properly abandoned.  The wells are in use and comply with 16 TAC Chapter 76.
	There are no wells or test holes of any kind known to exist on the project site.

#### **Administrative Information**

15. Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

# **ATTACHMENT A**

GEOL <sub>O</sub>	SEOLOGIC ASSESSMENT TABLE PROJECT NAME: 301 N IH 35																			
	LOCATION FEATURE CHARACTERISTICS EVALUATION									Р	PHYSICAL SETTING									
1A	1B *	1C*	2A	2B	3		4		5	5A	6	7	8A	8B	9	1	10	1	1	12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIME	NSIONS	(FEET)	TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENS	ITIVITY		ENT AREA RES)	TOPOGRAPHY
						Х	Υ	Z		10						<40	<u>&gt;40</u>	<1.6	<u>&gt;1.6</u>	
No geologic or man-made features were identified on the property																				
	_																			
															-					
							_									_	_			
							$\vdash$													

#### \* DATUM: WGS84

2A TYPE	TYPE	2B POINTS
С	Cave	30
sc	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
0	Other natural bedrock features	!
MB	Manmade feature in bedrock	30
SW	Swallow hole	30
SH	Sinkhole	20
CD	Non-karst closed depression	
Z	Zone, clustered or aligned features	30

#### 8A INFILLING

- None, exposed bedrock
- C Coarse cobbles, breakdown, sand, gravel
- Loose or soft mud or soil, organics, leaves, sticks, dark colors
- Fines, compacted clay-rich sediment, soil profile, gray or red colors
- Vegetation. Give details in narrative description
- FS Flowstone, cements, cave deposits
  - Other materials

Hoursen -

#### 12 TOPOGRAPHY

Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field.

My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Date 16 April 2021

Sheet 1 of 1



# **ATTACHMENT B**

#### **Stratigraphic Column for 301 N IH 35**

\*Shaded areas represent lithologies underlying the project area

		Buda	
sn	Kbu	Limestone	
Upper	Kdr	Del Rio Clay	
C	Kgt	Georgetown	
		Limestone	
		~ 75 feet	
Lower	Ked	Edwards Limestone ~ 100 feet	Edwards Aquifer
Lov	Кср	Comanche Peak Limestone ~ 50 feet	
	Kwa	Walnut Formation ~ 100 feet	

# **ATTACHMENT C**

#### INTRODUCTION

This narrative Geologic Assessment accompanies the Texas Commission on Environmental Quality (TCEQ) Geologic Assessment Form TCEQ-0585 completed for the approximately 2.4-acre tract located at 301 N IH 35 in Georgetown, Williamson County, Texas (See Figure 1). At present, the 2.4-acre tract (Williamson County parcel R040360) has no improvements.

#### **METHODOLOGY**

Two Cambrian Environmental Registered Professional Geoscientists (Texas License #s 10791 and 1350) conducted a field survey for a Geologic Assessment on the 26<sup>th</sup> of March 2021. The pedestrian survey was completed by walking parallel transects spaced approximately 50 feet apart as directed by the TCEQ in the Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones (Rev. 10-01-04). Closer spacing was used where vegetation inhibited clear observation. All potential karst features, including depressions, holes, and animal burrows, were carefully examined for evidence of subsurface extent. A number of techniques were used for this effort, including probing with a digging implement to determine the thickness and consistency of fill material and feeling for the presence of air flow, which may indicate the presence of a sub-surface void space. Other techniques included making observations of any notable characteristics of the feature site such as the presence of various types of vegetation or a semi-circular burrow mound produced by the activities of small mammals. We also conducted due diligence activities as called for under the City of Georgetown Edwards Aquifer Recharge Zone Water Quality Ordinance ("the Ordinance").

#### **RESULTS**

#### Soils

Soils mapped on the property consist of the Georgetown stony clay loam (GsB) series soils<sup>1</sup> (See Figure 2). This series soils is within the "D" classification of the hydrologic soil groups. Type "D" soils have a very slow infiltration rate (very high runoff potential) when thoroughly wet. This Georgetown soil unit is nearly level to gently sloping and occurs on uplands. Typically, this soil has a slightly acid, brown stony clay loam surface layer about 7 inches thick. The subsoil is neutral to slightly acid, reddish brown cobbly clay that extends to about 35 inches.

#### Geology

The bedrock lithology underlying the site consists entirely of the Edwards Limestone (See Figure 3). The geology of the property has been mapped most recently at a useful scale by Collins (2005) and we find his

<sup>&</sup>lt;sup>1</sup> United States Department of Agriculture, Natural Resource Conservation Service. Online Web Soil Survey, Williamson County, Texas. http://websoilsurvey.sc.egov.usda.gov/

interpretation of the geology to be generally accurate.<sup>2</sup> Additionally, the entire project site is within the Edwards Aquifer Recharge Zone.

Recharge into the aquifer primarily occurs in areas where the Edwards Group and upper confining units are exposed at the surface. Most recharge is from direct infiltration via precipitation and streamflow loss. Recharge occurs predominantly along secondary porosity features such as faults, fractures, and karst features (caves, solution cavities, sinkholes, etc.). Karst features are commonly formed along joints, fractures, and bedding plane surfaces in the Edwards Group. There is one fault mapped 200 feet east of the project area which juxtaposes the Edwards Limestone on the west and Georgetown Limestone on the east. No evidence of the fault trace was directly observed during the pedestrian survey.

#### Site Hydrogeologic Assessment

In the absence of discrete recharge features, the likelihood of significant recharge occurring within the project area and contributing to the main body of the aquifer is thought to be very low. Should any features be discovered during the land clearing or construction phases of the project, they should be investigated by a qualified geoscientist to determine if notification to TCEQ and mitigation measures will be necessary.

#### **Feature Descriptions**

No geologic or man-made features were identified during the pedestrian survey. A review of the Texas Water Development Board's online Groundwater Data Viewer did not produce any results for any existing wells located on this property.

#### City of Georgetown Salamander Ordinance

No springs or streams were identified on the property during the pedestrian survey, and therefore no occupied site protection, or spring or stream buffer protection measures will be required for the property. All regulated activities within the recharge zone must follow water quality best management practices, and development of the property will need to comply with the water quality protection measures as outlined in Section 8 of the Ordinance.

<sup>&</sup>lt;sup>2</sup> Collins, E.W., 2005, Geologic Map of the West Half of the Taylor 30x60 Quadrangle: Central Texas Urban Corridor, Encompassing Round Rock, Georgetown, Salado, Briggs, Liberty Hill, and Leander. Bureau of Economic Geology, The University of Texas at Austin. Austin, Texas 78713-8924.

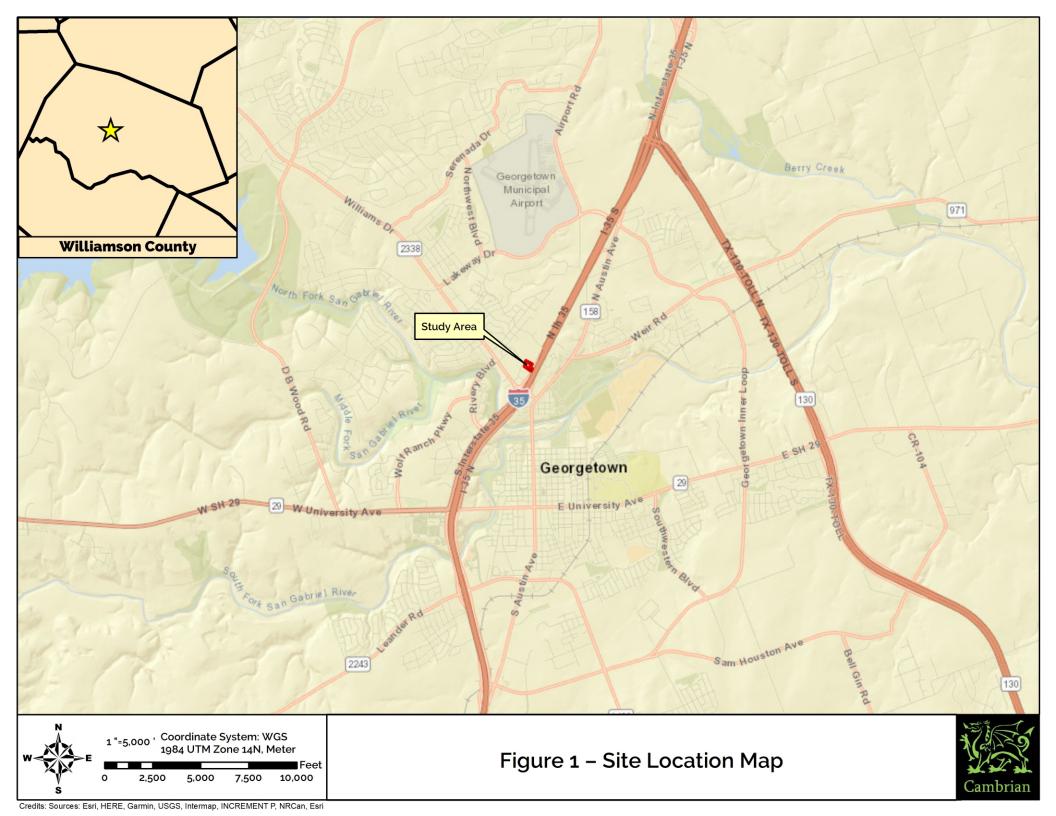
# **ATTACHMENT D**

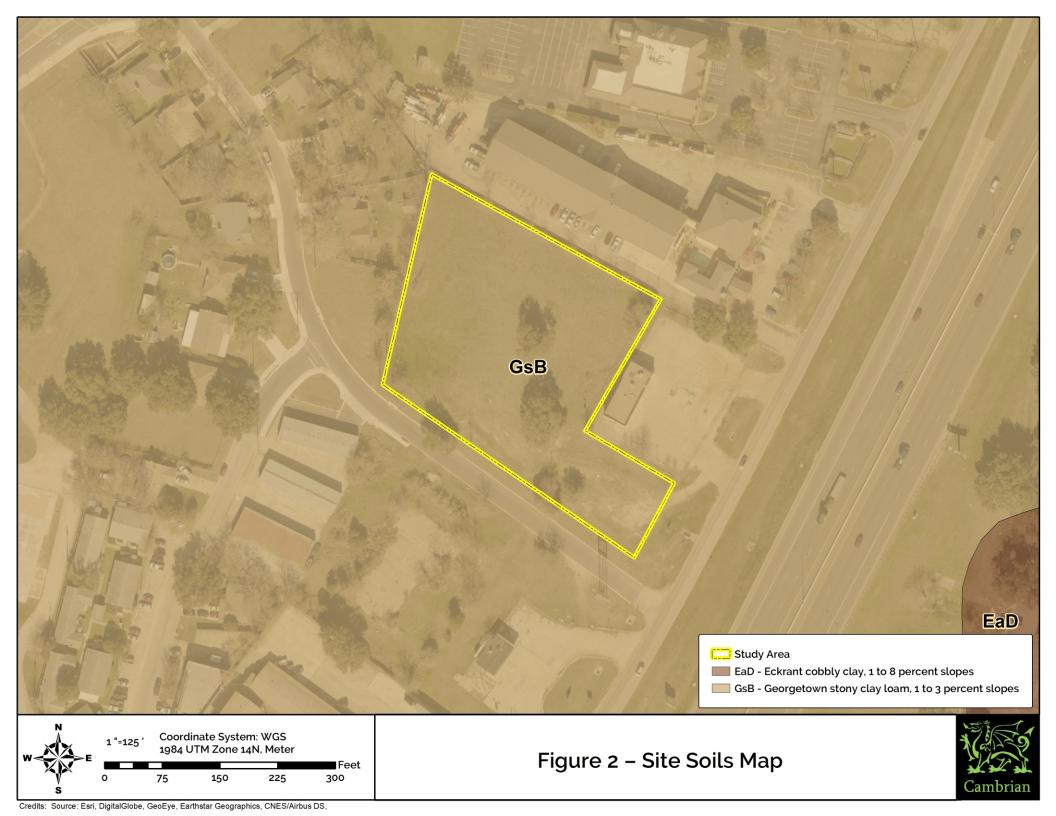


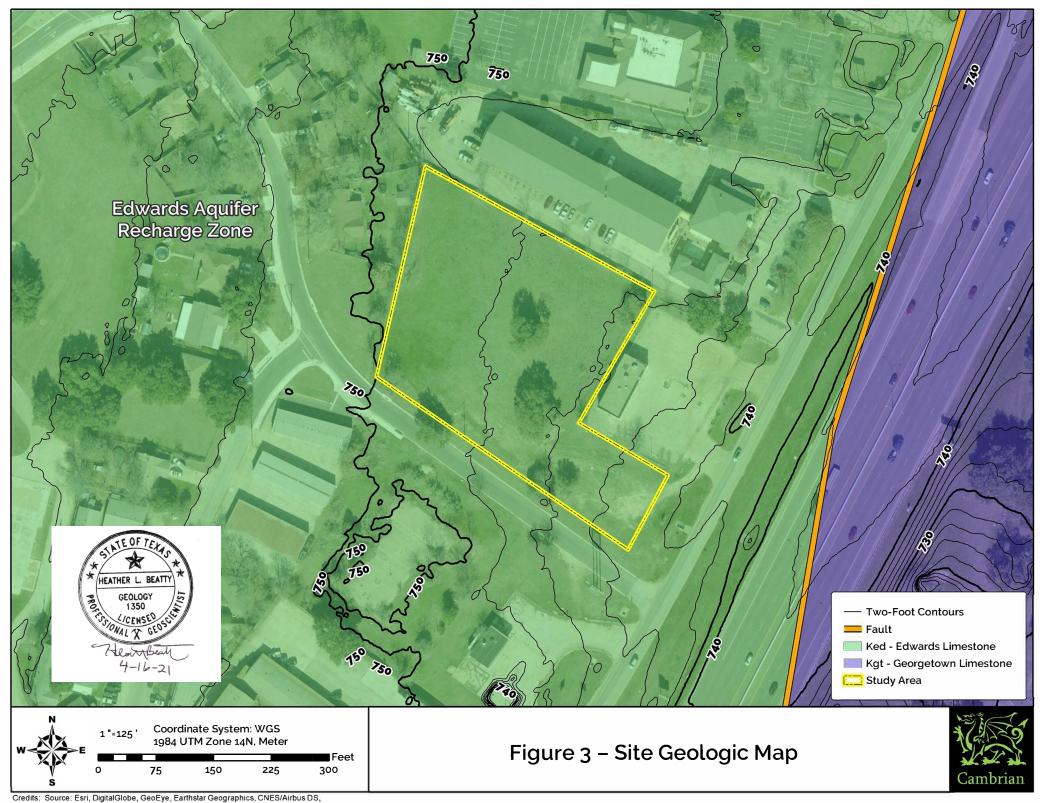
Typical view of the project area facing south.



Typical view of the project area facing east.







# WATER POLLUTION ABATEMENT PLAN APPLICATION FORM (TCEQ0584)

## Water Pollution Abatement Plan Application

**Texas Commission on Environmental Quality** 

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b), Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

#### Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **Water Pollution Abatement Plan Application Form** is hereby submitted for TCEQ review and Executive Director approval. The form was prepared by:

Print Name of Customer/Agent: <u>Andrew Belton, P.E.</u>

Date: <u>06/12/2024</u>

Signature of Customer/Agent:

Regulated Entity Name: Everhome Suites - Georgetown

#### Regulated Entity Information

The type of project is:
Residential: Number of Lots:\_\_\_\_\_
Residential: Number of Living Unit Equivalents:\_\_\_\_\_
Commercial
Industrial
Other:\_\_\_\_\_

- 2. Total site acreage (size of property):2.43
- 3. Estimated projected population:N/A
- 4. The amount and type of impervious cover expected after construction are shown below:

**Table 1 - Impervious Cover Table** 

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	17,617	÷ 43,560 =	0.40
Parking	47,446	÷ 43,560 =	1.09
Other paved surfaces	8,251	÷ 43,560 =	0.19
Total Impervious Cover	73,314	÷ 43,560 =	1.68

Total Impervious Cover  $\underline{1.68}$  ÷ Total Acreage  $\underline{2.43}$  X 100 =  $\underline{69.14}$ % Impervious Cover

- 5. Attachment A Factors Affecting Surface Water Quality. A detailed description of all factors that could affect surface water and groundwater quality that addresses ultimate land use is attached.
- 6. Only inert materials as defined by 30 TAC §330.2 will be used as fill material.

#### For Road Projects Only

Complete questions 7 - 12 if this application is exclusively for a road project.

7.	Type of project:
	<ul> <li>TXDOT road project.</li> <li>County road or roads built to county specifications.</li> <li>City thoroughfare or roads to be dedicated to a municipality.</li> <li>Street or road providing access to private driveways.</li> </ul>
8.	Type of pavement or road surface to be used:
	Concrete Asphaltic concrete pavement Other:
9.	Length of Right of Way (R.O.W.): feet.
	Width of R.O.W.: feet. $L \times W = $ $Ft^2 \div 43,560 Ft^2/Acre = acres.$
10.	Length of pavement area: feet.
	Width of pavement area: feet. L x W = $Ft^2 \div 43,560 Ft^2/Acre = acres$ . Pavement area acres $\div$ R.O.W. area acres x $100 = \%$ impervious cover.
11.	A rest stop will be included in this project.
	A rest stop will not be included in this project.

TCEQ Executive Director. Modifications	dways that do not require approval from the to existing roadways such as widening than one-half (1/2) the width of one (1) existing CEQ.	
Stormwater to be generated	by the Proposed Project	
occur from the proposed project is atta quality and quantity are based on the a	of Stormwater. A detailed description of the ty) of the stormwater runoff which is expected to eched. The estimates of stormwater runoff area and type of impervious cover. Include the re-construction and post-construction conditions.	
Wastewater to be generated	by the Proposed Project	
14. The character and volume of wastewater is	s shown below:	
100% Domestic% Industrial% Commingled TOTAL gallons/day <u>x</u>	Gallons/day Gallons/day Gallons/day	
15. Wastewater will be disposed of by:		
On-Site Sewage Facility (OSSF/Septic Ta	ank):	
<ul> <li>☐ Attachment C - Suitability Letter from Authorized Agent. An on-site sewage facility will be used to treat and dispose of the wastewater from this site. The appropriate licensing authority's (authorized agent) written approval is attached. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285 relating to On-site Sewage Facilities.</li> <li>☐ Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC Chapter 285.</li> </ul>		
Sewage Collection System (Sewer Lines	s):	
<ul> <li>Private service laterals from the wastewater generating facilities will be connected to an existing SCS.</li> <li>Private service laterals from the wastewater generating facilities will be connected to a proposed SCS.</li> </ul>		
<ul><li>☐ The SCS was previously submitted of</li><li>☐ The SCS was submitted with this ap</li><li>☐ The SCS will be submitted at a later</li><li>be installed prior to Executive Direct</li></ul>	plication. date. The owner is aware that the SCS may not	

	The sewage collection system will convey the wastewater to the (name) Treatment Plant. The treatment facility is:
	<ul><li>☑ Existing.</li><li>☑ Proposed.</li></ul>
16.	. $igthered$ All private service laterals will be inspected as required in 30 TAC §213.5.
Si	te Plan Requirements
Ite	ms 17 – 28 must be included on the Site Plan.
17.	The Site Plan must have a minimum scale of 1" = 400'.
	Site Plan Scale: 1" = <u>20</u> '.
18.	. 100-year floodplain boundaries:
	Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
	No part of the project site is located within the 100-year floodplain.  The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): <a href="DFIRM">DFIRM</a> (Digital Flood Insurance Rate Map for Williamson County, Texas and Incorporated Areas) Panel No. 4891C0293F, Dated 12/20/2019
19.	The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Lots, recreation centers, buildings, roads, open space, etc. are shown on the plan.
	The layout of the development is shown with existing contours at appropriate, but not greater than ten-foot intervals. Finished topographic contours will not differ from the existing topographic configuration and are not shown. Lots, recreation centers, buildings, roads, open space, etc. are shown on the site plan.
20.	All known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.):
	There are (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)
	<ul> <li>The wells are not in use and have been properly abandoned.</li> <li>The wells are not in use and will be properly abandoned.</li> <li>The wells are in use and comply with 16 TAC §76.</li> </ul>
	igspace There are no wells or test holes of any kind known to exist on the project site.
21.	Geologic or manmade features which are on the site:
	<ul> <li>☐ All sensitive geologic or manmade features identified in the Geologic Assessment are shown and labeled.</li> <li>☐ No sensitive geologic or manmade features were identified in the Geologic Assessment.</li> </ul>

	Attachment D - Exception to the Required Geologic Assessment. A request and justification for an exception to a portion of the Geologic Assessment is attached.
22. 🔀	The drainage patterns and approximate slopes anticipated after major grading activities
23. 🔀	Areas of soil disturbance and areas which will not be disturbed.
24. 🔀	Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.
25. 🔀	Locations where soil stabilization practices are expected to occur.
26. 🗌	Surface waters (including wetlands).
$\boxtimes$	N/A
27. 🗌	Locations where stormwater discharges to surface water or sensitive features are to occur.
$\boxtimes$	There will be no discharges to surface water or sensitive features.
28. 🔀	Legal boundaries of the site are shown.
Adm	ninistrative Information
29. 🔀	Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.
30. 🔀	Any modification of this WPAP will require Executive Director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

### **ATTACHMENT A**

#### **Attachment A - Factors Affecting Water Quality**

Potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges from the site during construction include:

- Soil erosion due to the clearing of the site;
- Oil, grease, fuel and hydraulic fluid contamination from construction equipment and vehicle drippings;
- Hydrocarbons from asphalt paving operations;
- Miscellaneous trash and litter from construction workers and material wrappings;
- Concrete truck washout.
- Potential overflow/spills from portable toilets

Potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges from the site after development include:

- Oil, grease, fuel and hydraulic fluid contamination from vehicle drippings;
- Dirt and dust which may fall off vehicles; and
- Miscellaneous trash and litter.



### **ATTACHMENT B**

#### Attachment B - Volume and Character of Stormwater

Stormwater runoff will increase as a result of this development. Stormwater runoff will be detained to a rate lower than that of pre-existing conditions. For a 25-year storm event, the overall project will generate approximately 20.65 cfs. The curve number of the site changes from approximately 84 before development to 90 after development. Values are based on the SCS Unit Hydrograph Method using curve number per the City of Georgetown Drainage Criteria Manual.



# TEMPORARY STORMWATER SECTION (TCEQ-0602)

#### **Temporary Stormwater Section**

**Texas Commission on Environmental Quality** 

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b)(4)(A), (B), (D)(I) and (G); Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

#### Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **Temporary Stormwater Section** is hereby submitted for TCEQ review and executive director approval. The application was prepared by:

Print Name of Customer/Agent: Andrew Belton, P.E.

Date: Un N

Signature of Customer/Agent:

Regulated Entity Name: Everhome Suites - Georgetown

#### **Project Information**

#### **Potential Sources of Contamination**

Examples: Fuel storage and use, chemical storage and use, use of asphaltic products, construction vehicles tracking onto public roads, and existing solid waste.

1. Fuels for construction equipment and hazardous substances which will be used during construction:

The following fuels and/or hazardous substances will be stored on the site: <u>Construction Stagin Area</u>

These fuels and/or hazardous substances will be stored in:

Aboveground storage tanks with a cumulative storage capacity of less than 250 gallons will be stored on the site for less than one (1) year.

	<ul> <li>Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year.</li> <li>Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.</li> </ul>
	Fuels and hazardous substances will not be stored on the site.
2.	Attachment A - Spill Response Actions. A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached.
3.	Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
4.	Attachment B - Potential Sources of Contamination. A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.
S	equence of Construction
5.	Attachment C - Sequence of Major Activities. A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is attached.
	<ul> <li>For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given.</li> <li>For each activity described, include a description of appropriate temporary control measures and the general timing (or sequence) during the construction process that the measures will be implemented.</li> </ul>
6.	Name the receiving water(s) at or near the site which will be disturbed or which will

#### Temporary Best Management Practices (TBMPs)

Erosion control examples: tree protection, interceptor swales, level spreaders, outlet stabilization, blankets or matting, mulch, and sod. Sediment control examples: stabilized construction exit, silt fence, filter dikes, rock berms, buffer strips, sediment traps, and sediment basins. Please refer to the Technical Guidance Manual for guidelines and specifications. All structural BMPs must be shown on the site plan.

receive discharges from disturbed areas of the project: Granger Lake - San Gabriel River

7. Attachment D – Temporary Best Management Practices and Measures. TBMPs and measures will prevent pollution of surface water, groundwater, and stormwater. The construction-phase BMPs for erosion and sediment controls have been designed to retain sediment on site to the extent practicable. The following information is attached:

	A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.
	A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.
	A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.
	A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.
8.	The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.
	Attachment E - Request to Temporarily Seal a Feature. A request to temporarily seal a feature is attached. The request includes justification as to why no reasonable and practicable alternative exists for each feature.
	There will be no temporary sealing of naturally-occurring sensitive features on the site.
9.	Attachment F - Structural Practices. A description of the structural practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided.
10.	Attachment G - Drainage Area Map. A drainage area map supporting the following requirements is attached:
	For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.
	For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used.
	For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not
	attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.
	There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area.

[	There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. Erosion and sediment controls other than sediment basins or sediment traps within each disturbed drainage area will be used.
t t r	Attachment H - Temporary Sediment Pond(s) Plans and Calculations. Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are attached.
	N/A
t r r	Attachment I - Inspection and Maintenance for BMPs. A plan for the inspection of each temporary BMP(s) and measure(s) and for their timely maintenance, repairs, and, if necessary, retrofit is attached. A description of the documentation procedures, recordkeeping practices, and inspection frequency are included in the plan and are specific to the site and/or BMP.
 i	All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections by the applicant or the executive director, or other information indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.
r f	If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).
	Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake will be provided that can indicate when the sediment occupies 50% of the basin volume.
F	Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).
Soil S	Stabilization Practices
-	es: establishment of temporary vegetation, establishment of permanent vegetation, og, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, or

preservation of mature vegetation.

17.  $\boxtimes$  Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices. A schedule of the interim and permanent soil stabilization practices for the site is attached.

- 18. Records must be kept at the site of the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
- 19. Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

#### Administrative Information

- 20. All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.
- 21. If any geologic or manmade features, such as caves, faults, sinkholes, etc., are discovered, all regulated activities near the feature will be immediately suspended. The appropriate TCEQ Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TCEQ has reviewed and approved the methods proposed to protect the aquifer from any adverse impacts.
- 22. Silt fences, diversion berms, and other temporary erosion and sediment controls will be constructed and maintained as appropriate to prevent pollutants from entering sensitive features discovered during construction.

### **ATTACHMENT A**

#### Attachment A - Spill Response Actions

In the event of an accidental leak or spill:

- Spill must be contained and cleaned up immediately.
- Spills will not be merely buried or washed with water.
- Contractor shall take action to contain spill. Contractor may use sand or other absorbent material stockpiled on site to absorb spill. Absorbent material should be spread over the spill area to absorb the spilled product.
- In the event of an uncontained discharge the contractor shall utilize onsite equipment to construct berms downgradient of the spill with sand or other absorbent material to contain and absorb the spilled product.
- Spill containment/absorbent materials along with impacted media must be collected and stored in such a way so as not to continue to affect additional media (soil/water). Once the spill has been contained, collected material should be placed on poly or plastic sheeting until removed from the site. The impacted media and cleanup materials should be covered with plastic sheeting and the edges weighed down with paving bricks or other similarly dense objects as the material is being accumulated. This will prevent the impacted media and cleanup materials from becoming airborne in windy conditions or impacting runoff during a rain event. The stockpiled materials should not be located within an area of concentrated runoff such as along a curb line or within a swale.
- Contaminated soils and cleanup materials will be sampled for waste characterization. When the analysis results are known the contaminated soils and cleanup materials will be removed from the site and disposed in a permitted landfill in accordance with applicable regulations.
- The contractor will be required to notify the owner, who will in turn contact TCEQ to notify them in
  the event of a significant hazardous/reportable quantity spill. Additional notifications as required by
  the type and amount of spill will be conducted by owner or owner's representative.

In the event of an accidental significant or hazardous spill:

The contractor will be required to report significant or hazardous spills in reportable quantities to:

- Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site. <a href="https://www.tceq.texas.gov/response/spills/spill\_rq.html">https://www.tceq.texas.gov/response/spills/spill\_rq.html</a>
- For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center at (800) 424-8802.



- Notification should first be made by telephone and followed up with a written report.
- The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.
- Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.
- Contaminated soils will be sampled for waste characterization. When the analysis results are known the contaminated soils will be removed from the site and disposed in a permitted landfill in accordance with applicable regulations.

Additional guidance can be obtained from TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) Section 1.4.16. Contractor shall review this section.



### **ATTACHMENT B**

#### <u>Attachment B – Potential Sources of Contamination</u>

Other potential sources of contamination during construction include:

Potential Source	Preventative Measure		
Asphalt products used on this project.	After placement of asphalt, emulsion or coatings, the contractor will be responsible for immediate cleanup should an unexpected rain occur. For the duration of the asphalt product curing time, the contractor will maintain standby personnel and equipment to contain any asphalt wash-off should an unexpected rain occur. The contractor will be instructed not to place asphalt products on the ground within 48 hours of a forecasted rain.		
Oil, grease, fuel, and hydraulic fluid contamination	<ul> <li>Vehicle maintenance when possible, will be</li> </ul>		
from construction equipment and vehicle dripping.	<ul> <li>performed within the construction staging area.</li> <li>Construction vehicles and equipment shall be checked regularly for leaks and repaired immediately.</li> </ul>		
Accidental leaks or spills of oil, petroleum products,	Contractor to incorporate into regular safety		
and substances listed under 40 CFR parts 110, 117,	meetings, a discussion of spill prevention and		
and 302 used or stored temporarily on site.	appropriate disposal procedures.		
	<ul> <li>Contractor's superintendent or representative overseer shall enforce proper spill prevention and control measures.</li> <li>Hazardous materials and wastes shall be stored</li> </ul>		
	in covered containers and protected from vandalism.		
	<ul> <li>A stockpile of spill cleanup materials shall be stored on site where it will be readily accessible.</li> </ul>		
Miscellaneous trash and litter from construction workers and material wrappings.	<ul> <li>Trash containers will be placed throughout the site to encourage proper trash disposal.</li> </ul>		
Construction debris.	<ul> <li>Construction debris will be monitored daily by contractor. Debris will be collected weekly and placed in disposal bins. Situations requiring immediate attention will be addressed on a case-by-case basis.</li> </ul>		
Spills/Overflow of waste from portable toilets	<ul> <li>Portable toilets will be placed away from high-traffic vehicular areas and storm drain inlets.</li> <li>Portable toilets will be placed on a level ground surface.</li> <li>Portable toilets will be inspected regularly for leaks and will be serviced and sanitized at time intervals that will maintain sanitary conditions.</li> </ul>		

### **ATTACHMENT C**

#### <u>Attachment C – Sequence of Major Activities</u>

The sequence of major activities which disturb soil during construction on this site will be divided into two stages. The first is site preparation that will include clearing and grubbing of vegetation where applicable. This will disturb approximately 2.43 acres. The second is construction that will include construction of buildings, the aqua filter and detention basin, construction of new pavement area, landscaping and site cleanup. This will disturb approximately 2.43 acres.

### **ATTACHMENT D**

#### <u>Attachment D – Temporary Best Management Practices and Measures</u>

A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.

Some upgradient water will cross the site. Upgradient water will be intercepted through earthen channels around the site and routed to onsite grate inlets. All TBMPs are adequate for the drainage areas they serve.

b. A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.

Site preparation, which is the initiation of all activity on the project, will disturb the largest amount of soil. Therefore, before any of this work can begin, the clearing and grading contractor will be responsible for the installation of all on-site control measures. The methodology for pollution prevention of on-site stormwater will include: (1) erection of silt fences along the downgradient boundary of construction activities for temporary erosion and sedimentation controls, (2) installation of rock berms with silt fencing downgradient from areas of concentrated stormwater flow for temporary erosion control, (3) Installation of gravel bags and drain inlet protection at inlets and downgradient areas of construction activities for sediment control (4) installation of stabilized construction entrance/exit(s) to reduce the dispersion of sediment from the site, and (5) installation of construction staging area(s).

Prior to the initiation of construction, all previously installed control measures will be repaired or reestablished for their designed or intended purpose. This work, which is the remainder of all activity on the project, may also disturb additional soil. The construction contractor will be responsible for the installation of all remaining on-site control measures that includes installation of the concrete truck washout pit(s), as construction phasing warrants.

Temporary measures are intended to provide a method of slowing the flow of runoff from the construction site in order to allow sediment and suspended solids to settle out of the runoff. By containing the sediment and solids within the site, they will not enter surface streams and/or sensitive features.

c. A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.

Temporary measures are intended to provide a method of slowing the flow of runoff from the construction site in order to allow sediment and suspended solids to settle out of the runoff. By containing the sediment and solids within the site, they will not enter surface streams and/or sensitive features.



d. A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.

BMP measures utilized in this plan are intended to allow stormwater to continue downstream after passing through the BMPs. This will allow stormwater runoff to continue downgradient to streams or features that may exist downstream of the site.



### **ATTACHMENT F**

#### **Attachment F – Structural Practices**

The following structural measures will be installed prior to the initiation of site preparation activities:

- Erection of silt fences along the downgradient boundary of construction activities with silt fence for secondary protection, as located on Exhibit 1 and illustrated in Exhibit 2.
- Installation of gravel bags and drain inlet protection at inlets and downgradient areas of construction activities, as located on Exhibit 1 and illustrated in Exhibit 2.
- Installation of stabilized construction entrance/exit(s) and construction staging area(s), as located on Exhibit 1, and illustrated on Exhibit 2.

The following structural measures will be installed at the initiation of construction activities or as appropriate based on the construction sequencing:

• Installation of concrete truck washout pit(s), as required and located on Exhibit 1 and illustrated on Exhibit 2.



### **ATTACHMENT G**

#### Attachment G - Drainage Area Map

No more than ten (10) acres will be disturbed within a common drainage area at one time as construction of civil infrastructure (utilities, roads, drainage, etc.) will precede home building construction. All TBMPs utilized are adequate for the drainage areas served.



### **ATTACHMENT I**

#### **INSPECTIONS**

Designated and qualified person(s) shall inspect Pollution Control Measures weekly and within 24 hours after a storm event. An inspection report that summarizes the scope of the inspection, names and qualifications of personnel conducting the inspection, date of the inspection, major observations, and actions taken as a result of the inspection shall be recorded and maintained as part of Storm Water TPDES data for a period of three years after the Notice of Termination (NOT) has been filed. A copy of the Inspection Report Form is provided in this Storm Water Pollution Prevention Plan.

As a minimum, the inspector shall observe: (1) significant disturbed areas for evidence of erosion, (2) storage areas for evidence of leakage from the exposed stored materials, (3) structural controls (rock berm outlets, silt fences, drainage swales, etc.) for evidence of failure or excess siltation (over 6 inches deep), (4) vehicle exit point for evidence of off-site sediment tracking, (5) vehicle storage areas for signs of leaking equipment or spills, (6) concrete truck rinse-out pit for signs of potential failure, (7) embankment, spillways, and outlet of sediment basin (where applicable) for erosion damage, and (8) sediment basins (where applicable) for evidence that basin has accumulated 50% of its volume in silt. Deficiencies noted during the inspection will be corrected and documented within seven calendar days following the inspection or before the next anticipated storm event if practicable.

Contractor shall review Sections 1.3 and 1.4 of TCEQ's Technical Guidance Manual for additional BMP inspection and maintenance requirements.



Pollution	.E	Corrective Action Required	
Prevention	ed ance		
Measure	nspected i Compliance	Description	Date
	<u> </u>	(use additional sheet if necessary)	Completed
Best Management Practices			
Natural vegetation buffer strips			
Temporary vegetation			
Permanent vegetation			
Sediment control basin			
Silt fences			
Rock berms			
Gravel filter bags			
Drain inlet protection			
Other structural controls			
Vehicle exits (off-site tracking)			
Material storage areas (leakage)			
Equipment areas (leaks, spills)			
Concrete washout pit (leaks, failure)			
General site cleanliness			
Trash receptacles			
Evidence of Erosion			<u>.</u>
Site preparation			
Roadway or parking lot construction			
Utility construction			
Drainage construction			
Building construction			
Major Observations			
Sediment discharges from site			
BMPs requiring maintenance			
BMPs requiring modification			
Additional BMPs required			
A brief statement describing the qualifications of the inspector is included in this SWP3.			
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."			
"I further certify I am an authorized signatory in accordance with the provisions of 30 TAC §305.128."			
Inspector's Name	Inspector	's Signature Date	e

#### **PROJECT MILESTONE DATES**

Date when major site grading activities begin: **Construction Activity Date** Installation of BMPs Dates when construction activities temporarily or permanently cease on all or a portion of the project: **Construction Activity** <u>Date</u> Dates when stabilization measures are initiated: **Stabilization Activity** <u>Date</u>

Removal of BMPs

### **ATTACHMENT J**

#### Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices

Interim on-site stabilization measures, which are continuous, will include minimizing soil disturbances by exposing the smallest practical area of land required for the shortest period of time and maximizing use of natural vegetation. As soon as practical, all disturbed soil will be stabilized as per project specifications in accordance with pages 1-35 to 1-60 of TCEQ's Technical Guidance Manual (TGM) RG-348 (2005). Mulching, netting, erosion blankets and seeding are acceptable.

Stabilization measures will be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and except as provided below, will be initiated no more than fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within twenty-one (21) days, temporary stabilization measures do not have to be initiated on that portion of site. In areas experiencing droughts where the initiation of stabilization measures by the 14<sup>th</sup> day after construction activity has temporarily or permanently ceased is precluded by seasonably arid conditions, stabilization measures must be initiated as soon as practicable.



# PERMANENT STORMWATER SECTION (TCEQ-0600)

#### **Permanent Stormwater Section**

**Texas Commission on Environmental Quality** 

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b)(4)(C), (D)(Ii), (E), and (5), Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

#### Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **Permanent Stormwater Section** is hereby submitted for TCEQ review and executive director approval. The application was prepared by:

Permanent best management practices and measures that will be used during and after construction is completed.

1.	Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction.
	□ N/A
2.	These practices and measures have been designed, and will be constructed, operated, and maintained to insure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance prepared or accepted by the executive director.
	The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.

	A technical guidance other than the TCEQ TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is:
	□ N/A
3.	Owners must insure that permanent BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the appropriate regional office within 30 days of site completion.
	□ N/A
4.	Where a site is used for low density single-family residential development and has 20 % or less impervious cover, other permanent BMPs are not required. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.
	The site will be used for low density single-family residential development and has
	20% or less impervious cover.  ☐ The site will be used for low density single-family residential development but has more than 20% impervious cover.  ☐ The site will not be used for low density single-family residential development.
5.	The executive director may waive the requirement for other permanent BMPs for multifamily residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.
	<ul> <li>Attachment A - 20% or Less Impervious Cover Waiver. The site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is attached.</li> <li>☐ The site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.</li> <li>☐ The site will not be used for multi-family residential developments, schools, or small</li> </ul>
	business sites.
6.	Attachment B - BMPs for Upgradient Stormwater.

	A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is attached.
	<ul> <li>No surface water, groundwater or stormwater originates upgradient from the site and flows across the site, and an explanation is attached.</li> <li>Permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, and an explanation is attached.</li> </ul>
7.	Attachment C - BMPs for On-site Stormwater.
	<ul> <li>A description of the BMPs and measures that will be used to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff from the site is attached.</li> <li>Permanent BMPs or measures are not required to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, and an explanation is attached.</li> </ul>
8.	<b>Attachment D - BMPs for Surface Streams</b> . A description of the BMPs and measures that prevent pollutants from entering surface streams, sensitive features, or the aquifer is attached. Each feature identified in the Geologic Assessment as sensitive has been addressed.
	N/A
9.	The applicant understands that to the extent practicable, BMPs and measures must maintain flow to naturally occurring sensitive features identified in either the geologic assessment, executive director review, or during excavation, blasting, or construction.
	<ul> <li>The permanent sealing of or diversion of flow from a naturally-occurring sensitive feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed.</li> <li>Attachment E - Request to Seal Features. A request to seal a naturally-occurring sensitive feature, that includes, for each feature, a justification as to why no reasonable and practicable alternative exists, is attached.</li> </ul>
10.	<b>Attachment F - Construction Plans</b> . All construction plans and design calculations for the proposed permanent BMP(s) and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. The plans are attached and, if applicable include:
	<ul> <li>☑ Design calculations (TSS removal calculations)</li> <li>☑ TCEQ construction notes</li> <li>☑ All geologic features</li> <li>☑ All proposed structural BMP(s) plans and specifications</li> </ul>
	N/A

11. Attachment G - Inspection, Maintenance, Repair and Retrofit Plan. A plan for the inspection, maintenance, repairs, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan includes all of the following:
<ul> <li>✓ Prepared and certified by the engineer designing the permanent BMPs and measures</li> <li>✓ Signed by the owner or responsible party</li> <li>✓ Procedures for documenting inspections, maintenance, repairs, and, if necessary</li> </ul>
retrofit  A discussion of record keeping procedures
□ N/A
12. Attachment H - Pilot-Scale Field Testing Plan. Pilot studies for BMPs that are not recognized by the Executive Director require prior approval from the TCEQ. A plan for pilot-scale field testing is attached.
⊠ N/A
13. Attachment I -Measures for Minimizing Surface Stream Contamination. A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is attached. The measures address increased stream flashing, the creation of stronger flows and in-stream velocities, and other in-stream effects caused by the regulated activity, which increase erosion that results in water quality degradation.
□ N/A
Responsibility for Maintenance of Permanent BMP(s)
Responsibility for maintenance of best management practices and measures after construction is complete.
14. The applicant is responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred.
□ N/A
15. A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days of the transfer if the site is for use as a multiple single-family residential development, a multi-family residential development, or a non-residential development such as commercial, industrial, institutional, schools, and other sites where regulated activities occur.
□ N/A

# **ATTACHMENT B**

#### Attachment B - BMPs for Upgradient Stormwater

A portion of the neighboring residential property's pervious roof area will flow across the project limits and be intercepted by the proposed storm system. The onsite PBMP has been sized to account for the flows from these areas.

The proposed Permanent Best Management Practices (PBMPs) for stormwater treatment is one (1) aqua filter designed in accordance with the TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) to remove 80% of the increase in Total Suspended Solids (TSS) from the site. Due to the City of Georgetown requirements, the system has been designed to remove 85% of the increase in TSS.



# **ATTACHMENT C**

#### <u>Attachment C – BMPs for On-Site Stormwater</u>

The proposed Permanent Best Management Practices (PBMPs) for stormwater treatment is one (1) aqua filter which is designed in accordance with the TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) to remove 80% of the increase in Total Suspended Solids (TSS) from the site. Due to the City of Georgetown requirements, the system has been designed to remove 85% of the increase in TSS.



# **ATTACHMENT D**

#### <u>Attachment D - BMPs for Surface Streams</u>

The proposed Permanent Best Management Practices (PBMPs) for stormwater treatment is one (1) aqua filter which is designed in accordance with the TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) to remove 80% of the increase in Total Suspended Solids (TSS) from the site. Due to the City of Georgetown requirements, the system has been designed to remove 85% of the increase in TSS.



# **ATTACHMENT F**

#### <u>Attachment F – Construction Plans</u>

Please refer to the Exhibits Section of this application for the Water Pollution Abatement Site Plans.



# **ATTACHMENT G**

#### Attachment G – Inspection, Maintenance, Repair, and Retrofit Plan

This document has been prepared to provide a description and schedule for the performance of maintenance on permanent pollution abatement measures. Maintenance measures to be performed will be dependent on what permanent pollution abatement measures are incorporated into the project. The project specific water pollution abatement plan should be reviewed to determine what permanent pollution abatement measures are incorporated into a project.

It should also be noted that the timing and procedures presented herein are general guidelines, adjustment to the timing and procedures may have to be made depending on project specific characteristics as well as weather related conditions.

Where a project is occupied by the owner, the owner may provide for maintenance with his own skilled forces or contract for recommended maintenance of Permanent Best Management Practices. Where a project is occupied or leased by a tenant, the owner shall require tenants to contract for such maintenance services either through a lease agreement, property owners' association covenants, or other binding document.

I understand that I am responsible for maintenance of the Permanent Pollution Abatement Measures included in this project until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property or ownership is transferred.

I, the owner, have read and understand the requirements of the attached Maintenance Plan and Schedule.

Joshua Baran, Managing Member

√elfay 35, LLC

# INSPECTION AND MAINTENANCE SCHEDULE FOR PERMANENT POLLUTION ABATEMENT MEASURES

Recommended Frequency	Task to be Performed
	1
Annually*	√

<sup>\*</sup>Inspections to occur every three months during construction and the first year of operation. For the second and subsequent years post construction, the inspection and cleaning is annual.  $\sqrt{}$  Indicates maintenance procedure that applies to this specific site.

See description of maintenance task to be performed on the following pages. Frequency of maintenance tasks may vary depending on amount of rainfall and other weather-related conditions but may not be altered without TCEQ approval. Inspection frequency in subsequent years is based on the maintenance plan developed in the first year but must occur annually at a minimum.

A written record will be kept of inspection results and maintenance performed.

Task No. & Description		Included i	n this project
1.	Maintenance	Yes	Ne

#### Maintenance

An Aqua-Filter<sup>™</sup> Inspection & Maintenance Manual is provided for each site delivery. The disposal of captured material and spent filter media is periodically needed to ensure proper functionality of the Aqua-Filter<sup>™</sup> system. Maintenance cycles are ultimately dependent on site-specific pollutant loading conditions.

Fresh perlite filter media is white in color. The replacement of filter containers is generally needed if the perlite filter media is observed to exhibit a dark brown or black color, and/or if a noticeable excessive accumulation of sediment, oil or other materials occurs across the filter bed. Upon installation and uring construction, AquaShield™ recommends that the Aqua-Filter™ system be inspected every three months and the system be cleaned as needed. The HDS chamber should be inspected and cleaned at the end of construction regardless of whether it has reached its sediment or oil storage capacity. The HDS chamber relies on a single treatment and storage chamber which allows easy and open access from the surface to facilitate inspections and maintenance. There are no hidden or "blind" chambers in the HDS chamber.

During the first-year post-construction, the Aqua-Filter<sup>TM</sup> should again be inspected every three months and cleaned as needed. The unit should be inspected and cleaned once annually regardless of whether it has reached its sediment or floatable pollutant storage capacity. For the second and subsequent years post-construction, the Aqua-Filter<sup>TM</sup> can be inspected and cleaned once annually if the system did not reach full sediment or floatable pollutant capacity in the first-year post-construction. If the Aqua-Filter<sup>TM</sup> reached full sediment or floatable pollutant capacity in less than 12 months in the first-year post-construction, the system should be inspected once every six months and cleaned as needed. AquaShield<sup>TM</sup> recommends that bypass structures should also be inspected whenever the Aqua-Filter<sup>TM</sup> is inspected and maintained as needed. The filter media containers are the only components of the facility that require replacement.

Filter replacement activities can be performed without the on-site assistance of an AquaShield™ representative. AquaShield™ does not operate a maintenance service fleet, but on request can assist stakeholders to arrange for maintenance events. AquaShield™ further recommends that confined space entry techniques be used to perform tasks associated with filter replacement or entry to the filtration chamber for any other reason. Maintenance of the HDS chamber can be performed from the surface without entry.

Typically, the spent filter media and sediment do not require special waste handling or disposal permits. AquaShield™ recommends that all materials removed during the maintenance process be handled and disposed of in accordance with all applicable state and local guidelines. Depending on the influent pollutant characteristics of the facility drainage area, it may be appropriate to perform Toxicity Characteristics Leaching Procedure (TCLP) analyses on representative samples of the spent filter media to ensure that the handling and disposition of materials complies with all locally applicable environmental regulations. A properly permitted (e.g., lined) landfill will commonly accept materials recovered from a stormwater treatment system.



Essential elements of a maintenance event include the replacement and disposal of the filter media containers and vacuuming of floatable pollutants and sediment from the HDS and filtration chambers. Provided that there are no significant access restrictions to the facility, it is considered that a system inspection should not exceed one hour. Two scenarios for Aqua-Filter™ maintenance events are likely. The first and most common scenario provides for cleaning both components of the Aqua-Filter TM by utilizing a vacuum truck and replacing the filter media containers. It is estimated that on-site tasks associated with this scenario would require approximately one to twohours with a minimum two-man crew to meet confined space entry criteria. The second maintenance event scenario provides only for the cleaning of the HDS and filtration chambers by use of a vacuum truck; but, no replacement of the filter media containers. It is estimated that the on-site activities for the second scenario would require approximately one hour or less and could be performed by a one- or two-man crew, depending on whether entry to the filtration chamber is performed.



# **ATTACHMENT I**

#### <u>Attachment I – Measures for Minimizing Surface Stream Contamination</u>

Any points where discharge from the site is concentrated and erosive velocities exist will include appropriately sized energy dissipators to reduce velocities to non-erosive levels.



# AGENT AUTHORIZATION FORM (TCEQ-0599)

#### **Agent Authorization Form**

For Required Signature
Edwards Aquifer Protection Program
Relating to 30 TAC Chapter 213
Effective June 1, 1999

I	Joshua Baran	
	Print Name	
	Managing Member	
	Title - Owner/President/Other	
of	Clay 35, LLC	
	Corporation/Partnership/Entity Name	
have authorized	Pape-Dawson Consulting Engineers, LLC. Print Name of Agent/Engineer	
of	Pape-Dawson Consulting Engineers, LLC	
	Print Name of Firm	

to represent and act on the behalf of the above named Corporation, Partnership, or Entity for the purpose of preparing and submitting this plan application to the Texas Commission on Environmental Quality (TCEQ) for the review and approval consideration of regulated activities.

#### I also understand that:

- 1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to \$10,000 per day per violation.
- For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.
- Application fees are due and payable at the time the application is submitted. The
  application fee must be sent to the TCEQ cashier or to the appropriate regional office.
  The application will not be considered until the correct fee is received by the
  commission.
- 4. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and this form must accompany the completed application.
- 5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

#### SIGNATURE PAGE:

policant's Signature

THE STATE OF Texas

County of Williamson

BEFORE ME, the undersigned authority, on this day personally appeared Joshua Baran to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this

MY COMMISSION EXPIRES: 02-21-2026

# APPLICATION FEE FORM (TCEQ-0574)

## **Application Fee Form**

Texas Commission on Environmental Quality  Name of Proposed Regulated Entity: Everhome Suites - Georgetown  Regulated Entity Location: Northwest of Clay St and IH-35 intersection  Name of Customer: Clay 35, LLC  Contact Person: Joshua Baran, P.E. Phone: 521-779-7414  Customer Reference Number (if issued):CN  Regulated Entity Reference Number (if issued):RN				
Austin Regional Office (3373)		<b>□</b>		
Hays	Travis	⊠ W	illiamson	
San Antonio Regional Office (3362)	_			
Bexar	Medina	U\	/alde	
Comal	Kinney			
Application fees must be paid by che Commission on Environmental Qua form must be submitted with your	l <b>ity</b> . Your canceled o	check will serve as you	r receipt. <b>This</b>	
X Austin Regional Office	П	an Antonio Regional O	Office	
Mailed to: TCEQ - Cashier		Overnight Delivery to: 1		
			ictq - casillei	
Revenues Section 12100 Park 35 Circle  Mail Code 214 Building A, 3rd Floor				
P.O. Box 13088 Austin, TX 78753				
Austin, TX 78711-3088 (512)239-0357				
Site Location (Check All That Apply):				
Kecharge Zone	Recharge Zone Contributing Zone Transition Zone			
Type of Plan		Size	Fee Due	
Water Pollution Abatement Plan, Co	ontributing Zone			
Plan: One Single Family Residential I	Dwelling	Acres	\$	
Water Pollution Abatement Plan, Co	ontributing Zone			
Plan: Multiple Single Family Residen	tial and Parks	Acres	\$	
Water Pollution Abatement Plan, Co	ontributing Zone			
Plan: Non-residential		2.43 Acres	\$ 4,000	
Sewage Collection System		L.F.	\$	
Lift Stations without sewer lines		Acres	\$	
Underground or Aboveground Stora	ige Tank Facility	Tanks	\$	
Piping System(s)(only)		Each	\$	
Exception		Each	\$	
Extension of Time		Each	\$	

Signature: Date: Villari

### **Application Fee Schedule**

**Texas Commission on Environmental Quality** 

Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

#### Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

Project	Project Area in Acres	Fee
One Single Family Residential Dwelling	< 5	\$650
Multiple Single Family Residential and Parks	< 5	\$1,500
	5 < 10	\$3,000
	10 < 40	\$4,000
	40 < 100	\$6,500
	100 < 500	\$8,000
	≥ 500	\$10,000
Non-residential (Commercial, industrial, institutional,	< 1	\$3,000
multi-family residential, schools, and other sites	1 < 5	\$4,000
where regulated activities will occur)	5 < 10	\$5,000
	10 < 40	\$6,500
	40 < 100	\$8,000
	≥ 100	\$10,000

Organized Sewage Collection Systems and Modifications

Project	Cost per Linear Foot	Minimum Fee- Maximum Fee
Sewage Collection Systems	\$0.50	\$650 - \$6,500

# Underground and Aboveground Storage Tank System Facility Plans and Modifications

Project	Cost per Tank or Piping System	Minimum Fee- Maximum Fee
Underground and Aboveground Storage Tank Facility	\$650	\$650 - \$6,500

**Exception Requests** 

Proj	ect	Fee
Exception Request		\$500

**Extension of Time Requests** 

Project	Fee
Extension of Time Request	\$150

# POLLUTANT LOAD AND REMOVAL CALCULATIONS

#### **EVERHOME SUITES - GEORGETOWN**

#### Treatment Summary by Watershed

Watershed	Total Watershed Area (ac.)	Existing Impervious Cover (ac.)	Proposed Impervious Cover (ac.)	РВМР	Required TSS Removal Annually, 80% (lbs)	Required TSS Removal Annually, 85% (lbs)	TSS Removed Annually (lbs)
Α	2.33	0.00	1.60	Aqua Filter "A1"	1393	1,480	1,554
OFFSITE	0.45	0.05	0.00	Aqua Filter "A1"	0	0	0
B Uncaptured	0.08	0.00	0.08	Overtreatment Aqua Filter "A1"	70	74	0
TOTAL	2.86	0.05	1.68		1,463	1,554	1,554

TSS Removal Calculations for Aqua-Filter

Project Name: Everhomes Suites
Date Prepared: 6/13/2024

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell. Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.

Characters shown in red are data entry fields.

Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

#### 1. The Required Load Reduction for the total project:

Calculations from RG-348

Pages 3-27 to 3-30

Page 3-29 Equation 3.3:  $L_M = 27.2(A_N \times P)$ 

where:

 $L_{\text{MTOTAL PROJECT}}$  = Required TSS removal resulting from the proposed development = 80% of increased load

A<sub>N</sub> = Net increase in impervious area for the project

P = Average annual precipitation, inches

Site Data: Determine Required Load Removal Based on the Entire Project

County = W	/illiamson	
ncluded in plan * =	2.56 acres	S
limits of the plan * =	0.00 acres	S
limits of the plan* =	1.68 acres	S
us cover fraction * =	0.66	
P=	32 inche	es

L<sub>M</sub> TOTAL PROJECT =

1462

Number of drainage basins / outfalls areas leaving the plan area =

#### 2. Drainage Basin Parameters (This information should be provided for each basin):

	DA-1	Drainage Basin/Outfall Area No. =
acres	2.33	Total drainage basin/outfall area =
acres	0.00	Predevelopment impervious area within drainage basin/outfall area =
acres	1.60	Post-development impervious area within drainage basin/outfall area =
	0.69	Post-development impervious fraction within drainage basin/outfall area =
lhe	1303	I

#### 3. Indicate the proposed BMP Code for this basin.

Proposed B	BMP = Aq	ua-Filter	
Removal efficie	encv =	92	percer

#### 4. Calculate Maximum TSS Load Removed (L<sub>R</sub>) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: L<sub>R</sub> = (BMP efficiency) x P x (A<sub>I</sub> x 34.6 + A<sub>P</sub> x 0.54)

where:

 $A_C$  = Total On-Site drainage area in the BMP catchment area  $A_I$  = Impervious area proposed in the BMP catchment area

A<sub>P</sub> = Pervious area remaining in the BMP catchment area

L<sub>R</sub> = TSS Load removed from this catchment area by the proposed BMP

 $A_C =$  2.33 acres  $A_I =$  1.60 acres  $A_P =$  0.73 acres  $A_P =$  1641 lbs

0.95

#### 5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired L<sub>M THIS BASIN</sub> = 1554 lbs.

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area.

Calculations from RG-348

Pages 3-34 to 3-36

Rainfall Depth = 2.60 inches

Post Development Runoff Coefficient = 0.49
On-site Water Quality Volume = 10833 cubic feet

Channel OF TEXAS



<sup>\*</sup> The values entered in these fields should be for the total project area.

#### Calculations from RG-348 Pages 3-36 to 3-37

	Off-site area draining to BMP =	0.45	acres	
	Off-site Impervious cover draining to BMP =	0.05	acres	
	Impervious fraction of off-site area =	0.11		
	Off-site Runoff Coefficient =	0.13		
	Off-site Water Quality Volume =	572	cubic feet	
	Storage for Sediment =	2281		
Total Capture Volum	e (required water quality volume(s) x 1.20) =	13687	cubic feet	
7. Aqua-Filter Flow Sizing				
1. Figure 1 mer 1 for orenig				
	C = runoff coefficient for the drainage area =	0.63		
	i = design rainfall intensity =	2.60	in/hour	
	A = drainage area in acres =	2.33	acres	
	L.amaga araa m aaraa			

Required Water Quality Flow for Aqua-Filter = 3.80 cubic feet per second Aqua-Filter Model Recommended = AF-7.9

# CORE DATA FORM (TCEQ-10400)



TCEQ Use Only

## **TCEQ Core Data Form**

For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

### **SECTION I: General Information**

1. Reason fo	or Submis	sion (If other is o	hecked please	describ	e in space	provideo	)					
		tration or Authori					,	the pr	ogram	applicatio	n.)	
☐ Renewa	) [	Ot	her									
2. Customer Reference Number (if issued)					Follow this link to search			ılated l	Entity I	Reference	Number (	if issued)
CN					or RN numbe tral Registry*	rs in	RN					
ECTION	II: Cu	stomer Info	ormation									
4. General C	ustomer l	nformation	5. Effective D	Date for	r Custome	r Inform	ation l	Jpdate:	s (mm/	dd/yyyy)		
New Cus     □Change ir		ne (Verifiable wit			o Customer of State or			ller of I		•	Regulated I	Entity Ownership
The Custo	mer Nar	ne submitted	here may be	e upda	ated auto	matica	lly ba	sed o	on wh	at is cui	rrent and	active with the
Texas Sec	retary o	f State (SOS)	or Texas Co	mptro	oller of P	ublic A	ccou	nts (C	PA).			
6. Customer	Legal Na	ne (If an individua	l, print last name	first: eg:	Doe, John)		<u>If ne</u>	ew Cus	tomer, e	enter previ	ous Custom	er below:
Clay 35, I	LC											
7. TX SOS/C		Number	8. TX State T	ax ID (1	11 digits)		9. F	ederal	Tax ID	(9 digits)	10. DUN	S Number (if applicable)
08038983	78		32077423	815			86	-1570	938			
11. Type of	Customer:		ion	☐ Individual Partnership: ☐ General ☑ Limite				al 🛛 Limited				
Government:	☐ City ☐	County 🔲 Federal 🛭	☐ State ☐ Other		☐ Sole F	roprieto	ship		Other:			
<b>12. Number</b> ⊠ 0-20 □	of Employ 21-100	rees 101-250	<u> 251-500</u>	<u></u> 50	01 and high	ier		Indepe Yes	endent	ly Owned	and Opera	ted?
14. Custome	r Role (Pr	oposed or Actual) -	- as it relates to th	he Regu	lated Entity I	isted on t	his form	. Please	e check	one of the	following	
☐ Owner ☐ Occupation	nal Licens	☐ Opera ee ☐ Respo	tor onsible Party		⊠ Owner 8 □ Voluntar			licant		Other:		
	1625 V	Williams Dri	ve									V
15. Mailing												
Address:	City	Georgetown	n	Sta	ite TX		ZIP	7862	8		ZIP + 4	-
16. Country	Mailing In	formation (if outsi			in the land	17. E-I	Mail Ac	dress	(if applic	able)	Li	
•						josh(						
18. Telephor	ne Numbe			19. Ext	ension or	Code			20. Fa	x Numbe	r (if applica	ole)
(521)77	9-7414								(	) .	-	
ECTION	III: R	egulated Er	ntity Inform	matio	on							
		-				elected b	elow ti	his forn	n shoul	d be acco	mpanied by	a permit application)
New Reg	ulated Enti	ty 🔲 Update	to Regulated E	ntity Na	ame 🗌	Update t	o Regu	ulated E	Entity In	formation		
						order t	o me	et TCI	EQ Ag	gency D	ata Stand	lards (removal
		endings such				in taldes	nlass 1					4
		ame (Enter name	oi the site where	ine regi	iiateu action	is taking	piace.)		laux.	CIE 3.1	n die	
Evernome	Sulles	Georgetown										

TCEQ-10400 (02/21) Page 1 of 2

23. Street Address	s of	301 N	IH 35										
the Regulated Ent	- 1200 B					_	_						
(No PO Boxes)	1	City	Geo	rgetown	State	TX	ZIP	786	28	ZIP + 4			
24. County		Willian	mson										
				ysical Loca	ation Descript	ion if no st	reet addres	s is pro	vided.				
25. Description to Physical Location		Northy	vest of	the Clay	St and IH-	35 S Serv	vice Rd ir	nterse	ction.				
26. Nearest City		10.00			Sec. 14.	-1	. 4	State		Nea	rest ZIP Code		
Georgetown								TX		780	628		
27. Latitude (N) In	Decima	al:	30.6	53489		28. 1	Longitude (	W) In D	ecimal:	-97.6787	60		
Degrees		Minutes		Sec	onds	Degre	ees		Minutes		Seconds		
39			39		12.6		97		4	40	43.5		
29. Primary SIC Co	<b>ode</b> (4 di	igits) 30	). Secon	dary SIC Co	ode (4 digits)	31. Prima (5 or 6 digi	ary NAICS (	ode	<b>32. S</b> (5 or 6	econdary NA digits)	ICS Code		
7011						721110	)						
33. What is the Pri			of this e	ntity? (Do	not repeat the SIC	or NAICS de	scription.)						
Extended Stay	Hote	1											
34. Mailing						30	01 N IH 35						
Address:													
714410001	1.4	City	Ge	orgetown	State	TX	ZIP		78628	ZIP + 4			
35. E-Mail Ad	dress:				-	josh(	@seven10de	ev.com					
36. T	elephoi	ne Numb	er		37. Extensi	on or Code	dd eithr	pro s	38. Fax Nu	mber (if appl	icable)		
(	521 ) 77	79-7414							(	) -			
<b>89. TCEQ Programs</b> orm. See the Core Data	<b>and ID</b> Form in	Numbers structions	Check al for additio	l Programs ar nal guidance.	nd write in the pe	ermits/registra	ation numbers	that will	be affected	by the updates	submitted on this		
☐ Dam Safety		☐ Distri	cts	]	⊠ Edwards Aqı	uifer	☐ Emissi	ions Inve	entory Air	☐ Industria	l Hazardous Waste		
_													
☐ Municipal Solid Wa	aste	☐ New	Source Re	eview Air	OSSF		Petrole	eum Stor	age Tank	PWS			
Chudeo			- \M-t		T:41- \/ A:-								
Sludge		☐ Storr	n Water		Title V Air	_	Tires			Used Oil			
☐ Voluntary Cleanup	ŕ	☐ Wast	e Water		☐ Wastewater	Agriculture	ulture Water Rights Other:						
						. ig. rountar o	7	1911.0		- Cultur			
SECTION IV:	Prep	oarer l	nforn	nation			_						
40. Name: Jean Au	itrey, l	P.E., C	ESSW)	[		41. Title	: Proje	ect Ma	anager				
42. Telephone Num	42. Telephone Number 43. Ext./Code 44. Fax Number 45. E-Mail Address												
(210) 375-9000 ( ) - jautrey@pape-dawson.com													
SECTION V:	Auth	orize	d Sign	ature									
<b>16.</b> By my signature ignature authority to dentified in field 39.	below, l	certify, t	o the bes	t of my knov									
	Pane-D	awson C	onsultina	Engineers,	LLC	Job Titl	e: Vice	Preside	ent				
	Andrew				7	300 110	7100			/ 210 \ 27E	0000		
	, and ew	DORUIT	4		5	,			hone:	(210) 375-	annn		
Signature:		l l	M	w	CX -			D	ate:				

TCEQ-10400 (02/21) Page 2 of 2

# **EXHIBITS**

## DEMOLITION NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL NECESSARY PERMITS/APPROVALS BEFORE BEGINNING DEMOLITION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING FROM THE SITE ALL ITEMS SHOWN TO BE DEMOLISHED UNLESS OTHERWISE INDICATED. ALL MATERIALS SHALL BE DEMOLISHED AND REMOVED FROM SITE IN ACCORDANCE WITH ALL APPLICABLE, FEDERAL, STATE AND LOCAL
- ALL EXISTING ITEMS NOT SPECIFICALLY NOTED TO BE DEMOLISHED SHALL REMAIN. CONTRACTOR IS RESPONSIBLE FOR REPLACING EXISTING ITEMS REMOVED DURING DEMOLITION THAT WERE TO REMAIN.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH ALL UTILITY COMPANIES REGARDING REMOVAL OF EXISTING SERVICES, POWER POLES TO BE REMOVED, VERIFYING UTILITIES ARE SHUT OFF OR DISCONNECTED, AND THAT ALL POSSIBLE SAFETY PRECAUTIONS HAVE BEEN ENACTED TO ENSURE THE SAFEST ENVIRONMENT FOR ALL PERSONNEL.
- LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO THE CONSTRUCTION AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, THROUGHOUT ALL PHASES OF
- ALL NECESSARY EROSION CONTROL MEASURES ARE TO BE IN PLACE PRIOR TO CONSTRUCTION. EROSION CONTROL MEASURES ARE TO BE MAINTAINED AND IN WORKING CONDITION AT ALL TIMES.
- CONTRACTOR SHALL CONFIRM WITH THE OWNER OR HIS DESIGNATE WHETHER TO SALVAGE AND MAKE ARRANGEMENTS TO STOR TRANSPLANTABLE TREES PRIOR TO REMOVAL.
- FOR TREES SHOWN TO REMAIN, THE CONTRACTOR SHALL INSTALL TREE PROTECTION IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL NOT REMOVE OR DAMAGE ANY TREES WITHOUT A PERMIT TO DO SO.
- NO PARKING AND/OR STORAGE SHALL BE ALLOWED WITHIN THE DRIP LINE OF THE TREES TO REMAIN.
- THE CONTRACTOR SHALL SAW CUT EXISTING PAVEMENT, CURBS AND SIDEWALKS AT NEW PAVEMENT, CURB AND SIDEWALK JUNCTURES, NO JAGGED OR IRREGULAR CUTS WILL BE ACCEPTED.
- THE CONTRACTOR SHALL PROTECT ALL PROPERTY PINS, BENCH MARKS, CONSTRUCTION STAKES, HUBS, OR OTHER KEY CONTROL POINTS. THE CONTRACTOR SHALL BE RESPONSIBLE TO RE-ESTABLISH ANY SUCH POINTS AT THEIR OWN EXPENSE.
- . DEMOLITION CONTRACTOR IS RESPONSIBLE FOR CLEARING THE SITE OF ALI OBSTRUCTIONS THAT EXIST ON THIS SITE PRIOR TO THE START OF CONSTRUCTION OR DURING THE CONSTRUCTION SO AS TO NOT IMPEDE THE BUILDING CONSTRUCTION CONTRACTOR.
- . CONTRACTOR SHALL COORDINATE WITH THE OWNER TO IDENTIFY ANY MATERIAL OR EQUIPMENT SCHEDULED FOR REMOVAL TO BE SALVAGED AND REUSED. CONTRACTOR SHALL REPLACE AT HIS EXPENSE ANY DESTROYED MATERIAL OR EQUIPMENT THAT WAS MARKED FOR SALVAGE
- . CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND DISPOSAL OF AL HAZARDOUS MATERIAL OFFSITE FOLLOWING ALL APPLICABLE DISPOSABLE REGULATIONS. ON SITE CONCRETE PROPOSED FOR DEMOLITION MAY BE REUSED ON SITE AS FILL AS LONG AS IT IS CRUSHED, FREE OF REBAR, WIRE MESH AND DEBRIS AND CAN MEET GEOTECHNICAL SPECIFICATIONS.
- CONTRACTOR SHALL REMOVE ALL EXISTING IRRIGATION PIPING ON SITE UNLESS SHOWN OTHERWISE. CUT AND CAP LATERALS AT PROJECT LIMITS TO ALLOW PROPER FUNCTION OF ZONES INTENDED TO REMAIN OR EXTEND
- CONTRACTOR SHALL NOT DEMOLISH ANY PUBLIC WATER OR SANITARY SEWER LINES WITHOUT APPROVAL. EXISTING WATER AND SANITARY SEWER SERVICES SHALL REMAIN OPERATIONAL UNTIL NEW SERVICE IS COMPLETE. CUT AND CAP ANY ABANDONED SANITARY SEWER AND WATER SERVICES AT THE EXISTING MAIN. NO ABANDONED SERVICES SHALL REMAIN CONNECTED TO THE PUBLIC MAIN.
- . THE USE OF EXPLOSIVES WILL NOT BE PERMITTED.
- CONTRACTOR. APPROPRIATE DISPOSAL OF WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT HIS OWN EXPENSE. OWNER WILL PROVIDE LIST OF ITEMS TO BE SALVAGED.
- . THE CONTRACTOR SHALL MAINTAIN THE SITE IN A CLEAN AND ORDERLY
- THE CONTRACTOR SHALL MEET ALL LOCAL, STATE, AND FEDERAL REGULATIONS FOR DUST CONTROL. THE CONTRACTOR SHALL BE RESPONSIBLE AT THEIR OWN EXPENSE FOR ANY FUGITIVE DUST ON ADJOINING PROPERTIES.

## DIMENSIONAL CONTROL NOTES

- THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY ARISE CONCERNING THE INTENT. PLACEMENT OR LIMITS OF DIMENSIONS NECESSARY FOR CONSTRUCTION OF THE PROJECT.
- THE CONTRACTOR SHALL PRESERVE ALL CONTROL POINTS, PROPERTY PINS, BENCH MARKS, HUBS OR OTHER KEY CONTROL POINTS. THE CONTRACTOR SHALL BE RESPONSIBLE TO RE-ESTABLISH ANY SUCH POINTS AT THEIR OWN EXPENSE IN THE EVENT THEY ARE REMOVED.
- DIMENSIONAL CONTROL FOR ANY STRUCTURE IS BASED ON INFORMATION PROVIDED BY THE ARCHITECT OR STRUCTURAL ENGINEER. THI CONTRACTOR SHALL VERIFY ALL PROJECT DIMENSIONS WITH THE PROJECT DRAWINGS PRIOR TO CONSTRUCTION AND TO COMMUNICATE TO THE ENGINEER OF ANY DISCREPANCIES.
- UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL USE THE TRAVERSE CONTROL POINTS FOR HORIZONTAL CONTROL POINTS. IF TRAVERSE CONTROL POINTS ARE NOT PROVIDED, THE CONTRACTOR MAY USE PROPERTY CORNER PINS. BENCHMARKS ARE NOT TO BE USED FOR HORIZONTAL CONTROL.
- COORDINATES FOR HORIZONTAL CONTROL POINTS ARE BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM. SOUTH CENTRAL ZONE. AND 83(96) DISPLAYED IN SURFACE VALUES USING A SURFACE ADJUSTMENT FACTOR FOR EACH COUNTY. (THE SURFACE ADJUSTMENT FACTOR FOR BEXAR COUNTY IS 1.00017. OTHER COUNTIES WILL HAVE A DIFFERENT FACTOR; CHECK WITH THE SURVEYOR TO OBTAIN THE CORRECT SURFACE ADJUSTMENT FACTOR FOR PROJECTS LOCATED OUTSIDE OF BEXAR COUNTY.)
- BENCHMARK ELEVATIONS ARE BASED ON NAVD 88, GEOID 03.
- ALL DIMENSIONAL CONTROL POINTS OR DIMENSIONS ARE TO THE FACE OF CURB, FACE OF RETAINING WALL AT THE BOTTOM TOE OF SLOPE, AND CENTER OF PAINT STRIPING. ALL DIMENSIONS ARE PERPENDICULAR TO THE POINT OF REFERENCE.
- CURB RADII ARE 3' UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- REFER TO THE ARCHITECTURAL, STRUCTURAL, AND LANDSCAPE PLANS AS APPLICABLE FOR ADDITIONAL DIMENSIONAL CONTROL INFORMATION.
- THE CONTRACTOR SHALL RELY ON THE INFORMATION PROVIDED ON TH SIGNED AND SEALED CONSTRUCTION DRAWINGS. SUBJECT TO A SIGNED RELEASE AGREEMENT, CAD FILES MAY BE OBTAINED FROM THE ENGINEER FOR THE CONVENIENCE AND USE OF THE CONTRACTOR.

## PAVEMENT & STRIPING NOTES

- ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THIS SCOPE OF WORK WHERE NOT SPECIFICALLY COVERED IN THE SPECIFICATIONS OR GEOTECHNICAL REPORT SHALL CONFORM TO ALL APPLICABLE CITY, COUNTY OR TXDOT STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION).
- THE CONTRACTOR SHALL LOCATE AND PROTECT ALL EXISTING UTILITY AND STORM DRAIN SYSTEMS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL,

OR BETTER, CONDITION ANY DAMAGE DONE TO EXISTING TREES, BUILDINGS,

- UTILITIES, FENCES, PAVEMENT, CURBS, OR DRIVEWAYS (NO SEPARATE PAY THE CONTRACTOR SHALL VERIFY ELEVATIONS AND LOCATIONS OF EXISTING
- FACILITIES AND NOTIFY THE ENGINEER OF ANY CONFLICTS PRIOR TO BEGINNING CONSTRUCTION.
- ALL PAINT SHALL BE 4" WIDE REFLECTIVE PAINT: WHITE ON ASPHALT PAVING AND YELLOW ON CONCRETE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ALL PAVEMENT MARKINGS SHALL RECEIVE TWO COATS OF PAINT. NO WORK SHALL BE PERFORMED IN A PUBLIC RIGHT-OF-WAY WITHOUT A

ALL SIGNS SHALL CONFORM TO MUTCD, LATEST EDITION.

- THE CONTRACTOR SHALL SAW CUT EXISTING PAVING, CURB, AND SIDEWALKS TO PROVIDE A SMOOTH TRANSITION. NO JAGGED OR IRREGULAR EDGES WILL
- D. ALL CURBS WITHIN PRIVATE PROPERTY SHALL BE 6" HIGH AND ALL CURBS WITH IN PUBLIC RIGHT-OF-WAY SHALL BE 7" HIGH UNLESS OTHERWISE
- ALL STANDARD PERPENDICULAR PARKING STALLS ARE 9' X 18' AND COMPACT PARKING STALLS ARE 8' X 16' UNLESS DIMENSIONED OTHERWISE.

## **GRADING NOTES**

- ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THIS SCOPE OF WORK WHERE NOT SPECIFICALLY COVERED IN THE SPECIFICATIONS OR GEOTECHNICAL REPORT SHALL CONFORM TO ALL APPLICABLE CITY, COUNTY AND TXDOT STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION).
- SITE PREPARATION, GRADING, EXCAVATION AND FILL SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT AND SPECIFICATIONS.
- ALL SELECT FILL MATERIAL PROVIDED SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING AND COMPACTING.
- ALL ELEVATIONS AND PROPOSED CONTOURS SHOWN ON THIS GRADING PLAN REFLECT FINISHED GRADES. THE THICKNESS OF PAVING, BASE, GRASS, TOPSOIL, AND MULCH MUST BE SUBTRACTED TO OBTAIN SUBGRADE
- THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY ARISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OF DIMENSIONS OR GRADES NECESSARY FOR CONSTRUCTION OF THIS
- THE CONTRACTOR SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE COMMENCEMENT OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT.
- THE CONTRACTOR SHALL REMOVE TOP SOIL, GRASS, ROOTS, DEBRIS, ETC AND DISPOSE OFF SITE THOSE MATERIALS NOT SUITABLE FOR EMBANKMENT AND TOPSOIL. CLEAN STRIPPINGS AND TOPSOIL MAY BE STOCKPILED ON SITE FOR REUSE IN A LOCATION SPECIFIED BY THE OWNER.
- . ALL WASTE MATERIAL REMAINING AFTER OWNER SALVAGE IS COMPLETE AND | 9. THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE STABILIZATION. ALL RESULTING FROM DEMOLITION OPERATIONS BECOMES THE PROPERTY OF THE DISTURBED AREAS SHALL BE REVEGETATED IN ACCORDANCE WITH PROJECT SPECIFICATIONS AND TPDES/SWPPP REQUIREMENTS. REFERENCE THE LANDSCAPE ARCHITECT'S PLAN, IF APPLICABLE.
  - O. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS (EROSION CONTROL MEASURES) TO KEEP DRAINAGE AND SILT FROM WASHING ONTO ADJACENT PROPERTÝ, STREETS, OR DRAINAGE WAYS. CONTRACTOR SHALL IMMEDIATELY REMOVE SILT/DEBRIS WHICH WASHES OFFSITE OR INTO EXISTING STORM DRAIN SYSTEMS. (SEE SWPPP PLANS & TPDES BOOK).
  - THE CONTRACTOR SHALL OBTAIN GRADES SHOWN HEREON WITHIN +/-ONE-TENTH (0.10) FOOT.
  - 12. IN PROPOSED PAVING AREAS. IT IS INTENDED THAT THE MINIMUM GRADE IS 1%. ALL EARTHEN SLOPES SHALL BE A MAXIMUM OF 3:1 AND A MINIMUM OF 2.0% UNLESS OTHERWISE SHOWN.
  - 3. ACCESSIBILITY: SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%. SIDEWALK LONGITUDINAL SLOPE ALONG ACCESSIBLE ROUTES SHALL NOT EXCEED 5%, UNLESS OTHERWISE NOTED. SIDEWALK CURB RAMPS SHALL NOT EXCEED 8.33%. (SEE CURB RAMP DETAILS). CURB RAMP LANDINGS SHALL NOT EXCEED 2% ACCESSIBLE PARKING STALLS SHALL NOT EXCEED 2% IN ANY
  - 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL, OR BETTER, CONDITION ANY DAMAGE DONE TO EXISTING TREES, BUILDINGS UTILITIES, FENCES, PAVEMENT, CURBS, OR DRIVEWAYS (NO SEPARATE PAY
  - 5. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN WORKING NEAR UTILITIES, GAS LINES, SEWER, OR EXISTING APPURTENANCES. PRIOR TO PERFORMING ANY EXCAVATION, CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND ENSURE UTILITIES HAVE BEEN ADEQUATELY LOCATED AND IDENTIFIED. THE ENGINEER SHALL BE NOTIFIED IF ANY UTILITY CONFLICTS
  - 5. POSITIVE DRAINAGE SHALL BE MAINTAINED THROUGHOUT THE SCOPE OF TH PROJECT. DRAINAGE SHALL BE DIRECTED AWAY FROM ALL BUILDING FOUNDATIONS. CONTRACTOR SHOULD TAKE PRECAUTIONS NOT TO ALLOW ANY PONDING OF WATER.
  - . FOR FILL PLACEMENT ON HILL SIDES OR STEEP SLOPE AREAS, THE CONTRACTOR SHALL REFERENCE THE PROJECT SPECIFICATIONS AND GEOTECHNICAL REPORT FOR SPECIAL INSTRUCTIONS REGARDING BENCHING.

DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL. AERIAL IMAGERY PROVIDED BY GOOGLE® UNLESS OTHERWISE NOTED. Imagery © 2016,CAPCOG,Digital Globe,Texas Orthoimagery Program, USDA Farm Service Agency.

I8. NO WORK SHALL BE PERFORMED IN A PUBLIC RIGHT—OF—WAY WITHOUT A

## SITE UTILITY NOTES

- THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL UTILITIES AND DRAINAGE STRUCTURES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES PRIOR TO CONSTRUCTION TO VERIFY SIZE, GRADE, AND LOCATION. THI CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DEVIATIONS FROM PLANS PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE T EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR, AT HIS EXPENSE.
- DRAWINGS DO NOT SHOW ALL EXISTING UTILITIES. ALL EXISTING UTILITIES SHALL BE VERIFIED IN THE FIELD WHETHER SHOWN ON THIS PLAN OR NO (PRIOR TO INSTALLATION OF ANY NEW LINES).
- ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES
- CONTRACTOR SHALL CALL FOR THE LOCAL JURISDICTIONAL INSPECTIONS AT LEAST 48 HOURS PRIOR TO STARTING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL JURISDICTION WITH REGARDS TO MATERIALS AND INSTALLATION OF THE UTILITIES AND STORM DRAINS.
- CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS, SPECIFICATIONS AND ALL TESTING.
- ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS PROJECT SHALL COMPLY WITH THE FOLLOWING AS APPLICABLE:
  - A. CURRENT "GEORGETOWN WATER SYSTEM STANDARD SPECIFICATIONS FOR CONSTRUCTION' B. CURRENT "GEORGETOWN WATER SYSTEM UTILITY SERVICE
  - REGULATIONS" C. CURRENT CITY OF GEORGETOWN "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION"
- D. CURRENT TXDOT "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS, AND DRAINAGE" E. CURRENT CITY OF GEORGETOWN "RIGHT-OF-WAY ORDINANCE AND
- CRITERIA MANUAL' MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
- ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I.
- . CONTRACTOR SHALL PROTECT ALL EXISTING TREES, FENCES, PAVING, UTILITIES, AND OTHER STRUCTURES SCHEDULED TO REMAIN. ANY STRUCTURE DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT THEIR EXPENSE.
- THE CONTRACTOR SHALL FURNISH THE ENGINEER WITH ALL FINAL UTILITY AS-BUILT MEASUREMENTS, TOPS AND LENGTH OF SERVICE CONNECTIONS OF
- 2. ALL GARBAGE OR SPOIL MATERIAL FROM THIS WORK SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AT HIS SOLE EXPENSE.
- 3. GAS AND ELECTRIC ALIGNMENTS SHOWN ON THIS DRAWING ARE CONCEPTUAL. THE ACTUAL DESIGN AND LOCATIONS SHALL BE DETERMINED BY THE LOCAL SERVICE PROVIDER OR MEP ENGINEER.
- 4. CONTRACTOR SHALL COORDINATE TELE. COMMUNICATIONS, CABLE, ELECTRIC AND GAS LINE INSTALLATION WITH LOCAL SERVICE PROVIDER. THE SERVICE PROVIDER WILL BE RESPONSIBLE FOR INSTALLATION OF GAS LINE TO WITHIN
- 5. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
- 16. SEE IRRIGATION, LIGHTING AND ARCHITECTURAL PLANS FOR ADDITIONAL CONDUIT LOCATIONS AS APPLICABLE. VERIFY ALL CONDUIT AND SLEEVE LOCATIONS PRIOR TO PLACING ANY PAVEMENT.
- 7. CONTRACTOR SHALL INSTALL ALL CONDUITS WITH A MINIMUM 4-FOOT SWEEP RADIUS. ALL CONDUITS SHALL HAVE A PULL STRING TO BE INSTALLED BY THE CONTRACTOR.
- 8. NO WORK SHALL BE ALLOWED WITHIN THE PUBLIC RIGHT-OF-WAY WITHOUT AN APPROVED PERMIT
- 19. THE CONSTRUCTION OF UNDERGROUND PRIMARY ELECTRIC AND GAS DISTRIBUTION SYSTEMS SHALL BE GOVERNED BY THE ENGINEERING CONSTRUCTION PLANS PREPARED BY THE LOCAL SERVICE PROVIDER. THIS DRAWING SHALL SERVE ONLY AS REFERENCE DOCUMENT TO COORDINATE LOCATION OF THE PROPOSED PRIMARY ELECTRIC AND GAS DISTRIBUTION SYSTEM. THE LOCAL SERVICE PROVIDER'S CONSTRUCTION DRAWINGS AND | 9. ALL GRATE INLETS MUST BE HS20 EQUIVALENT RATED GRATES. CONSTRUCTION DETAILS SHALL GOVERN.
- 20. CONTRACTOR SHALL INCLUDE IN HIS BID A 4" PVC CONDUIT FOR TELEPHONE AND A 2" PVC CONDUIT FOR CABLE TV TO BE IN THE SAME TRENCH AS UNDERGROUND ELECTRIC LINES. CONTRACTOR SHALL VERIFY WITH APPROPRIATE UTILITY COMPANY PRIOR TO CONSTRUCTION ON NUMBER AND SIZE OF CONDUITS NEEDED FOR UTILITY SERVICE TO ALL BUILDINGS.
- 21. BEDDING FOR ALL UTILITIES SHALL BE PER THE PROJECT SPECIFICATIONS. NO WATER JETTING OF BACKFILL MATERIAL WILL BE ALLOWED.

- ALL MATERIALS AND CONSTRUCTION PROCEDURES FOR THE WATER SYSTEM WITHIN THE SCOPE OF THIS CONTRACT SHALL CONFORM TO ALL APPLICABLE CITY OF GEORGETOWN CONSTRUCTION SPECIFICATIONS.
- MACHINE CHLORINATION SHALL BE BY THE CONTRACTOR ACCORDING TO THE SERVICE PROVIDER'S CONSTRUCTION SPECIFICATIONS.
- ALL WATER LINES SHALL BE FOUR-FOOT (4') BURY UNLESS OTHERWISE
- ALL WATER LINES SHALL BE PVC PIPE UNLESS OTHERWISE INDICATED. ALL 6 &8-INCH PVC WATER LINES SHALL BE CLASS 150 DR(18), MEETING AWWA 80 PVC. DUCTILE IRON WATER LINES SHALL BE CLASS 50.
- ALL WATER LINES MUST BE INSTALLED A MINIMUM DISTANCE OF 9-FEET HORIZONTALLY FROM SANITARY SEWER MAINS AND LATERALS. ALL VERTICAL CROSSINGS MUST CONFORM TO TCEQ, 30 TAC, CHAPTER 290, SEPARATION REQUIREMENTS AND METHODS. WHENEVER POSSIBLE ALL WATER LINES SHALL CROSS ABOVE SANITARY SEWER LINES.
- PER THE FIRE DEPARTMENT'S REQUIREMENTS. THE HYDROSTATIC TEST SHALL FOLLOW THE PROCEDURE LISTED IN THE LOCAL FIRE CODE.
- ALL OTHER LINES SHALL BE HYDROSTATICALLY TESTED BY THE CONTRACTOR, PER LOCAL JURISDICTIONAL REQUIREMENTS.
- THE OWNER WITH ALL FITTING-TO-FITTING DIMENSIONS, TYPES, AND MANUFACTURER OF MATERIALS USED AND LOCATIONS FOR ALL VALVES,
- THE SITE SHALL BE EXCAVATED OR FILLED TO SUBGRADE PRIOR TO THE CONSTRUCTION OF WATER AND FIRE LINES BY THE CONTRACTOR.
- BUILDING CONTRACTOR SHALL INCLUDE IN THEIR BID THE COST TO CONNECT ALL SERVICES TO THE BUILDING.
- 12. CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS FOR THE PROJECT
- INDICATED ON THE PLANS OR AS NEEDED AT NO ADDITIONAL PAYMENT. 3. CONTRACTOR SHALL PROVIDE TEMPORARY BLOWOFFS AS REQUIRED TO
- 4. UNIT PRICE BID FOR "STANDARD FIRE HYDRANT ASSEMBLY" SHALL INCLUDE FIRE HYDRANT, 6" GATE VALVE, 6" VALVE BOX, ANCHOR BEND, AND ALL 6" DUCTILE IRON PIPE REQUIRED TO COMPLETE INSTALLATION. (DUCTILE IRON PIPE SHALL INCLUDE ALL PIPE FROM THE TEE ON THE MAIN LINE TO THE FIRE HYDRANT.)
- 15. ALL FITTINGS SHALL BE MECHANICAL JOINT.
- 16. CONTRACTOR MUST BE AN APPROVED CITY OF GEORGETOWN AND APPROVED FIRELINE CONTRACTOR.
- 17. ALL PIPE DIMENSIONS ARE APPROXIMATE ONLY.

#### 8. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND COMPLETING AND COORDINATING ALL NECESSARY TESTS.

- 19. THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES, AND VALVES AS INDICATED ON THE ATTACHED WATER DISTRIBUTION SYSTEM DETAIL SHEET. 20. ALL FDC STANDPIPES SHALL HAVE A 4" LINE CONNECTING TO FIRE
  - SPRINKLER SYSTEM OF EACH BUILDING, CONTRACTOR SHALL VERIFY SIZE OF LINE WITH MEP PLANS. IF DISCREPANCIES EXIST MEP PLAN SHALL GOVERN AND CIVIL ENGINEER SHALL BE NOTIFIED IMMEDIATELY. CONTRACTOR SHALL REFER TO MEP PLANS FOR DETAILS OF CONNECTION AND ALIGNMENT OF

## SANITARY SEWER NOTES

- SEWER PIPE WHERE WATER LINE CROSSES SHALL BE 160 P.S.I. AND MEET THE REQUIREMENTS OF ASTM D2241 WITH ONE 20' JOINT CENTERED AT WATER MAIN.
- NO VERTICAL STACKS SHALL BE ALLOWED
- WHEN HORIZONTAL DISTANCE BETWEEN SEWER PIPES AND WATER MAIN IS LESS THAN 9 FT. OF SEPARATION, SEWER MAIN SHALL BE INSTALLED WITH 160 PSI (MIN) PRESSURE PIPE AND FITTINGS IN ACCORDANCE WITH CITY ( GEORGETOWN CONSTRUCTION CRITERIA FOR CONSTRUCTION OF SEWER MAINS
- IN THE VICINITY OF WATER MAINS. 4. ALL SEWER PIPES SHALL BE PVC (SDR 26), UNLESS OTHERWISE NOTED.
- PRIOR TO CONSTRUCTION CONTRACTOR IS TO VERIFY EXISTING INVERT OF EXISTING SANITARY SEWER MAINS AND ALERT ENGINEER IMMEDIATELY OF ANY DIFFERENCE FROM INVERT SHOWN ON PLANS.
- CONTOURS SHOWN ARE FOR GRAPHICAL USE ONLY.
- MANHOLE OPENINGS ARE 30" AS PER TCEQ CHAPTER 217.55
- CONTRACTOR TO INSTALL PERMANENT MARKERS AT THE END OF ALL SEWER LATERALS, PER HOUSE LATERAL DETAIL DD-854-01.
- 9. ALL 6" SEWER LATERALS WILL BE SET AT A MINIMUM 2% SLOPE.
- 10. BACKFILL MUST COMPLY WITH CITY OF GEORGETOWN SPECIFICATIONS 804.4.
- 1. TOPS OF EXISTING MANHOLES SHALL BE ADJUSTED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS, AND TO BE 0.50 FEET ABOVE FINISHED GROUND ELEVATIONS IN UNPAVED AREAS WITH WATER TIGHT

## DRAINAGE NOTES

- ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THIS SCOPE OF WORK SHALL COMPLY WITH THE PROJECT GEOTECH REPORT, THE PROJECT SPECIFICATIONS, AND THE CURRENT CITY, COUNTY OR TXDOT.
- THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES. THE CONTRACTOR SHOULD EXERCISE EXTREME CAUTION WHEN WORKING NEAR EXISTING UTILITIES AND SHOULD THEY BE DAMAGED DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR WILL BE REQUIRED TO REPAIR OR REPLACE THE DAMAGED FACILITIES AT CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ORIGINAL OR BETTER CONDITION DAMAGE DONE TO EXISTING FENCES, CURBS, STREETS,
- DRIVEWAYS, LANDSCAPING AND STRUCTURES. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL WASTE MATERIALS UPON PROJECT COMPLETION.
- WATER JETTING THE BACKFILL OF STORM DRAIN TRENCHES WILL NOT BE NORTHINGS AND EASTINGS LISTED ON THESE PLANS ARE TO CENTER OF BOX
- FOR JUNCTION BOXES AND GRATE INLETS AND TO OUTSIDE CORNER FACE OF CURB FOR ALL CURB AND COMBINATION INLETS. ALL LENGTHS OF PIPE ARE TO INSIDE FACE OF STRUCTURES. CONTRACTOR SHALL ENSURE PROPER SIZE OF JUNCTION BOXES NEEDED
- PIPE TO JUNCTION BOXES PER MANUFACTURES SPECIFICATIONS. 8. ALL STORM DRAIN TO JUNCTION BOX CONNECTIONS SHALL HAVE CONCRETE

WHERE INDICATED ON PLAN. CONTRACTOR SHALL CONNECT STORM DRAIN

BOXES, AND DROP STRUCTURES TO DRAIN.

10. TOPS OF MANHOLES, JUNCTION BOXES AND GRATES SHALL BE SET FLUSH TO FINISHED SURFACE BASED UPON GRADING PLAN. 11. CONTRACTOR SHALL GROUT INVERTS OF ALL STORM DRAIN INLETS, JUNCTION

## **CAUTION UNDERGROUND UTILITIES**

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES. AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO WATER, SEWER, TELEPHONE, AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCT BANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. THE CONTRACTOR MUST CONTACT 1-800-DIG-TESS AND CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION AND/OR START OF CONSTRUCTION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE TH RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES (WHETHER SHOWN ON PLANS OR NOT) WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTORS SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE

## CAUTION OVERHEAD UTILITIES

PLANS OR NOT.

CONTRACTOR TO EXERCISE EXTREME CAUTION WHEN WORKING UNDER "HIGH VOLTAGE TRANSMISSION LINES". A WORKING HEIGHT OF 30' FROM GROUND ELEVATION WILL BE OBSERVED WHEN WORKING UNDER THE HIGH VOLTAGE LINE. COORDINATE ALL WORK WITH THE LOCAL UTILITY PROVIDER.

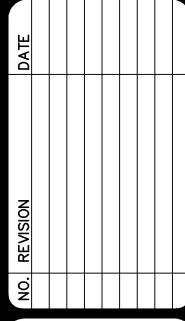
## TRENCH EXCAVATION SAFETY PROTECTION

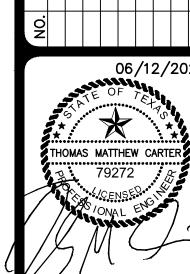
CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND /OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

- These construction plans were prepared, sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore based on the engineer's concurrence of compliance, the construction plans for construction of the proposed project are hereby approved subject to the standard Construction Specifications and Details Manual and all other applicable City, State and Federal Requirements and Codes.
- This project is subject to all City Standard Specifications and Details in effect at the time of submittal of the project to the City.
- The site construction plans shall meet all requirements of the approved site plan.
- Wastewater mains shall be low pressure air tested and mandrel tested by the contractor according to City of Georgetown and TCEQ requirements.
- Wastewater manholes shall be vacuum tested and coated by the contractor according to City of Georgetown
- Wastewater mains shall be camera tested by the contractor and submitted to the City on DVD format prior to paying the streets.
- 10. Private water system fire lines shall be tested by the contractor to 200 psi for 2 hours.

14. Long fire hydrant leads shall be restrained.

- Water and Sewer main crossings shall meet all requirements of the TCEQ and the City.
- 18. Hot mix asphaltic concrete pavement shall be Type D unless otherwise specified and shall be a minimum of 2 inches thick on public streets and roadways.
- 19. All sidewalk ramps are to be installed with the public infrastructure.
- A maintenance bond is required to be submitted to the City prior to acceptance of the public improvements. This bond shall be established for 1 year in the amount of 25% of the cost of the public improvements and shall follow the City format.
- Record drawings of the public improvements shall be submitted to the City by the design engineer prior to acceptance of the project. These drawings shall be on mylar or on TIFF or PDF disk (300dpi). If a disk is submitted, a bond set shall be included with the disk.





PLAT NO. 13397-00 APRIL 2024 DESIGNER ES/JV CHECKED TK DRAWNES/ C0.10

CASE, NO 2024-XX-SDP

C900 STANDARDS. ALL SERVICES 4 INCH AND SMALLER SHALL BE SCHEDULE

THE CONTRACTOR SHALL PERFORM A HYDROSTATIC TEST ON THE FIRE LINE

AT THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH

O. ALL SERVICES SHALL BE BROUGHT TO WITHIN 5 FEET OF THE BUILDING.

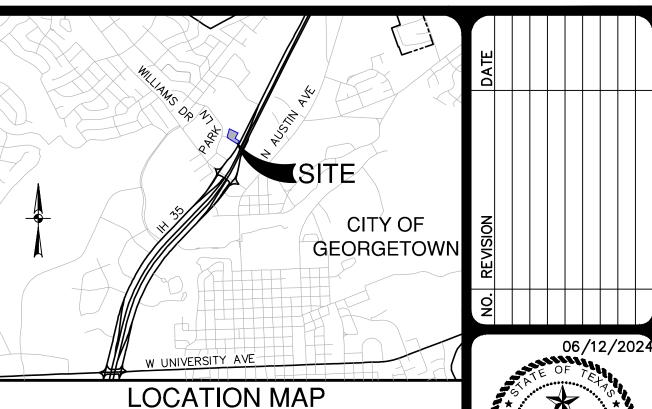
. REFER TO PLUMBING PLAN FOR LOCATION OF ALL WATER SERVICES TO

FACILITATE FLUSHING THE LINES AFTER THE TESTING AND DISINFECTION

#### General Notes

- Wastewater mains and service lines shall be SDR 26 PVC.
- Wastewater mains shall be installed without horizontal or vertical bends.
- Maximum distance between wastewater manholes is 500 feet.
- and TCEO requirements.
- 11. Private water system fire lines shall be ductile iron piping from the water main to the building sprinkler system, and 200 psi C900 PVC for all others.
- 12. Public water system mains shall be 150 psi C900 PVC and tested by the contractor at 150 psi for 2 hours.
- 13. All bends and changes in direction on water mains shall be restrained and thrust blocked.
- 15. All water lines are to be bacteria tested by the contractor according to the City standards and specifications.
- Flexible base material for public streets shall be TXDOT Type A Grade 1.

5 DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL. AERIAL IMAGERY PROVIDED BY GOOGLE® UNLESS OTHERWISE NOTED. Imagery © 2016,CAPCOG,Digital Globe,Texas Orthoimagery Program, USDA Farm Service Agency.



NOT-TO-SCALE LEGAL DESCRIPTION: **ADDRESS**: LOT: # ,BLOCK: # , N.C.B.: # 301 N IH 35 GEORGETOWN, TX 78628 (PLAT NO. # )

SCALE: 1"= 20'

PROJECT LIMITS

SILT FENCE

EXISTING CONTOUR

PROPOSED CONTOUR

FLOW ARROW (EXISTING)

GRAVEL FILTER BAGS

FLOW ARROW (PROPOSED)

GRATE INLET PROTECTION

STABILIZED CONSTRUCTION

MATERIALS STORAGE AREA

EDWARDS AQUIFER LIMESTONE

(FIELD LOCATE)

DRAINAGE AREA

ENTRANCE/EXIT (FIELD LOCATE)

CONSTRUCTION EQUIPMENT, VEHICLE &

(FIELD LOCATE)
CONCRETE TRUCK WASH-OUT PIT

## GENERAL NOTES

1. DO NOT DISTURB VEGETATED AREAS (TREES, GRASS, WEEDS, BRUSH, ETC.) ANY MORE THAN NECESSARY FOR CONSTRUCTION.

2. CONSTRUCTION ENTRANCE/EXIT LOCATION, CONCRETE WASH-OUT P AND CONSTRUCTION EQUIPMENT AND MATERIAL STORAGE YARD TO

3. STORM WATER POLLUTION PREVENTION CONTROLS MAY NEED TO MODIFIED IN THE FIELD TO ACCOMPLISH THE DESIRED EFFECT. MODIFICATIONS ARE TO BE NOTED ON THIS EXHIBIT AND SIGNED AND DATE

BY THE RESPONSIBLE PARTY. 4. RESTRICT ENTRY/EXIT TO THE PROJECT SITE TO DESIGNATED LOCATIONS

BY USE OF ADEQUATE FENCING, IF NECESSARY. 5. ALL STORM WATER POLLUTION PREVENTION CONTROLS ARE TO

MAINTAINED AND IN WORKING CONDITIONS AT ALL TIMES. 6. FOR A COMPLETE LISTING OF TEMPORARY STORM WATER POLLUTION

7. STORM WATER POLLUTION PREVENTION STRUCTURES SHOULD CONSTRUCTED WITHIN THE SITE BOUNDARIES. SOME OF THESE FEATURES MAY BE SHOWN OUTSIDE THE SITE BOUNDARIES ON THIS PLAN FOR VISUAL

8. AS SOON AS PRACTICAL, ALL DISTURBED SOIL THAT WILL NOT COVERED BY IMPERVIOUS COVER SUCH AS PARKWAY AREAS, EASEMENT

9. BEST MANAGEMENT PRACTICES MAY BE INSTALLED IN STAGES COINCIDE WITH THE DISTURBANCE OF UPGRADIENT AREAS.

10. BEST MANAGEMENT PRACTICES MAY BE REMOVED IN STAGES ONCE T WATERSHED FOR THAT PORTION CONTROLLED BY THE BEST MANAGEMENT PRACTICES HAS BEEN STABILIZED IN ACCORDANCE WITH TPDES

11. UPON COMPLETION OF THE PROJECT, INCLUDING SITE STABILIZATION AND BEFORE FINAL PAYMENT IS ISSUED, CONTRACTOR SHALL REMOVE AL SEDIMENT AND EROSION CONTROL MEASURES, PAYING SPECIAL ATTENTION TO ROCK BERMS IN DRAINAGE FEATURES.

12. WHERE VEGETATED FILTER STRIPS ARE INDICATED, CONTRACTOR SHAL VERIFY THAT SUFFICIENT VEGETATION EXISTS, OTHERWISE CONTRACTOR SHALL PLACE SILT FENCING IN LIEU OF VEGETATED FILTER STRIP.

13. SHADED AREA \_\_\_\_\_ DENOTES LIMITS OF DISTURBED AREAS. OTHE AREAS WITHIN THE PROJECT LIMITS, WITH THE EXCEPTION OF CONSTRUCTION EQUIPMENT AND MATERIAL STORAGE YARD, ARE NOT PART OF THIS TPDES STORM WATER POLLUTION PREVENTION PLAN (SWP) AND WILL NOT BE DISTURBED BY CIVIL CONSTRUCTION ACTIVITIES. HOUSE CONSTRUCTION ACTIVITIES WILL REQUIRE A SEPARATE STORM WATER POLLUTION PREVENTION PLAN.

14. PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR SHALL COORDINA PLACEMENT OF TEMPORARY BEST MANAGEMENT PRACTICES WITHIN TXDO RIGHT-OF-WAY WITH TXDOT.

15. CITY OF GEORGETOWN ENERGY WILL FUNCTION AS A SECONDARY OPERATOR ON THIS PROJECT AND WILL BE INSTALLING ELECTRIC UTILITI FOR ON-SITE CONSTRUCTION AND OFF-SITE FEED TO THE PROJECT.

16. A WILLIAMSON COUNTY ROW PERMIT MUST BE OBTAINED BEFOR WORKING IN ANY WILLIAMSON COUNTY ROW THE ENGINEERING SEAL HAS BEEN AFFIXED TO THIS SHEET ONLY FOR TH PURPOSE OF DEMONSTRATING COMPLIANCE WITH THE TPDES-STORM WATER

THIS SHEET HAS BEEN PREPARED FOR PURPOSES OF THE SWP3 ONLY. ALL OTHER CIVIL ENGINEERING RELATED INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE SHEET IN THE CIVIL IMPROVEMENT PLANS.

13397-00

APRIL 2024

DESIGNER ES/JV

HECKED TK DRAWN ES/

PERMIT SE

THOMAS MATTHEW CARTER

79272

HIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL. AERIAL IMAGERY PROVIDED BY GOOGLE® UNLESS OTHERWISE NOTED. Imagery © 2016,CAPCOG,Digital Globe,Texas Orthoimagery Program, USDA Farm Service Agency.

CITY OF GEORGETOWN 06/12/20 I UNIVERSITY AVE

**LOCATION MAP** NOT-TO-SCALE

ADDRESS: 301 N IH 35 GEORGETOWN, TX 78628 THOMAS MATTHEW CARTI

PROPOSED CONTOUR FLOW ARROW (EXISTING) FLOW ARROW (PROPOSED) SILT FENCE

DRAINAGE AREA

UNCAPTURED IMPERVIOUS COVER

## SUMMARY OF PERMANENT POLLUTION ABATEMENT MEASURES:

1.) TEMPORARY BMP'S WILL BE MAINTAINED UNTIL THE SITE IMPROVEMENTS ARE COMPLETED AND THE SITE HAS BEEN STABILIZED, INCLUDING SUFFICIENT VEGETATION BEING ESTABLISHED.

2.) DURING CONSTRUCTION, TO THE EXTENT PRACTICAL, CONTRACTOR SHALL MINIMIZE THE AREA OF SOIL DISTURBANCE. AREAS OF DISTURBED SOIL SHALL BE REVEGETATED TO STABILIZE SOIL USING SOLID SOD IN A STAGGERED PATTERN. SEE DETAIL ON TEMPORARY POLLUTION ABATEMENT DETAIL SHEET AND REFER TO SECTION 1.3.11 IN TCEQ'S TECHNICAL GUIDANCE MANUAL RG-348 (2005). SOD SHOULD BE USED IN CHANNELS AND ON SLOPES > 15%. THE CONTRACTOR MAY SUBSTITUTE THE USE OF SOD WITH THE PLACEMENT OF TOP SOIL AND A FRIABLE SEED BED WITH A PROTECTIVE MATTING OR HYDRAULIC MULCH ALONG WITH WATERING UNTIL VEGETATION IS ESTABLISHED. APPLICATIONS AND PRODUCTS SHALL BE THOSE APPROVED BY TXDOT AS OF FEBRUARY 2001 AND IN COMPLIANCE WITH THE TGM RG-348 (2005). SEED MIXTURE AND/OR GRASS TYPE TO BE DETERMINED BY OWNER AND SHOULD BE IN COMPLIANCE WITH TGM RG-348 (2005) GUIDELINES. IRRIGATION MAY BE REQUIRED IN ORDER TO ESTABLISH SUFFICIENT VEGETATION.

3.) FOR DISTURBED AREAS WHERE INSUFFICIENT SOIL EXISTS TO ESTABLISH VEGETATION, CONTRACTOR SHALL PLACE A MINIMUM OF 6" OF

4.) PERMANENT BMP'S FOR THIS SITE INCLUDE A AQUA FILTER. THESE PERMANENT BMP'S HAVE BEEN DESIGNED TO REMOVE AT LEAST 85% OF THE INCREASED TOTAL SUSPENDED SOLIDS (TSS) FOR THE 2.86 ACRES IN ACCORDANCE WITH THE TCEQ'S TECHNICAL GUIDANCE MANUAL (TGM)

5.) TYPICAL SLOPES ON THIS PROJECT RANGE FROM APPROXIMATELY 1.0% TO 3.0%.

1.) SILT FENCING AND ROCK BERMS, WHERE APPROPRIATE, WILL BE MAINTAINED UNTIL THE ROADWAY, UTILITY, DRAINAGE IMPROVEMENTS, AND

2.) A AQUA FILTER WILL SERVE AS THE PERMANENT BEST MANAGEMENT

3.) ENERGY DISSIPATORS (TO HELP REDUCE EROSION) WILL BE PROVIDED AT POINTS OF CONCENTRATED DISCHARGE WHERE EXCESSIVE VELOCITIES

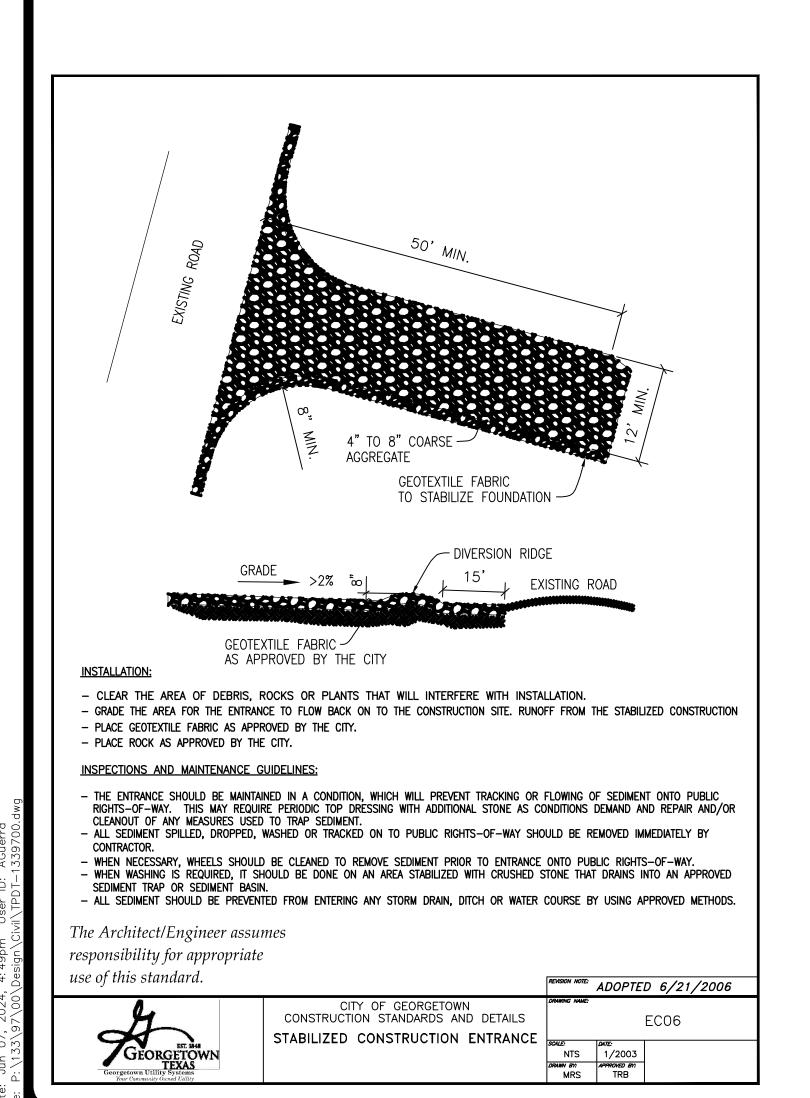
1.) CONTRACTOR SHALL INSTALL AND ESTABLISH VEGETATION FOR SOIL STABILIZATION PRIOR TO SITE CLOSEOUT.

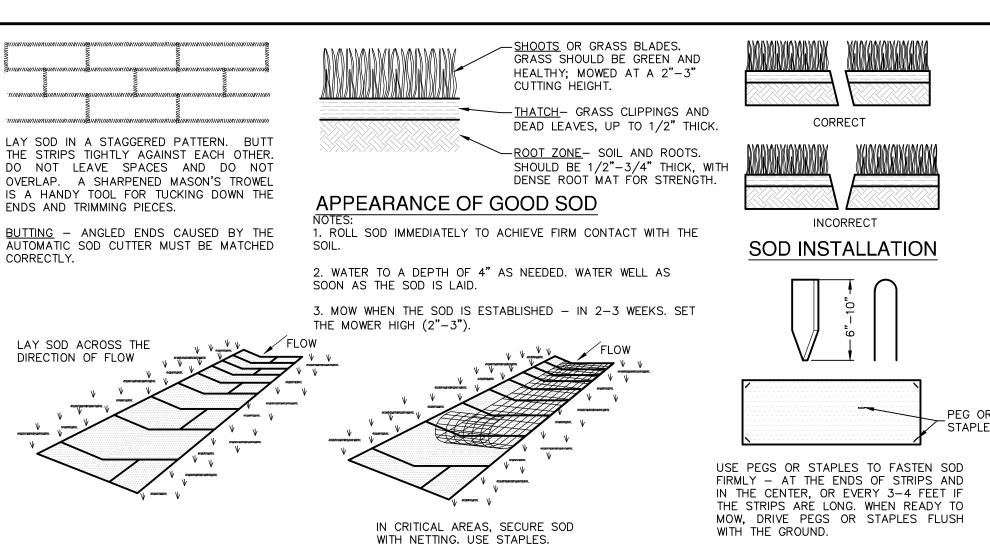
2.) ALL PERMANENT BMP'S MUST BE CERTIFIED BY A REGISTERED

THE ENGINEERING SEAL HAS BEEN AFFIXED TO THIS SHEET ONLY FOR TH PURPOSE OF DEMONSTRATING COMPLIANCE WITH THE TPDES-STORM WATER POLLUTION PREVENTION PLAN (SWP3) REGULATIONS.

THIS SHEET HAS BEEN PREPARED FOR PURPOSES OF THE SWP3 ONLY. ALL OTHER CIVIL ENGINEERING RELATED INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE SHEET IN THE CIVIL IMPROVEMENT PLANS.

JOB NO. 13397-00 JUNE 2024 DESIGNER ES/JV HECKED TK DRAWN ES/ C0.22





## GENERAL INSTALLATION (VA. DEPT. OF 1. SOD SHOULD BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4" INCH

SOD ALSO SHOULD NOT BE LAID ON SOIL SURFACES THAT ARE FROZEN. 2. DURING PERIODS OF HIGH TEMPERATURE, THE SOIL SHOULD BE LIGHTLY IRRIGATED IMMEDIATELY PRIOR TO LAYING THE SOD, TO COOL THE SOIL AND REDUCE ROOT BURNING AND DIEBACK.

SOD SHOULD NOT BE CUT OR LAID IN EXCESSIVELY WET OR DRY WEATHER.

THE FIRST ROW OF SOD SHOULD BE LAID IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO AND BUTTING TIGHTLY AGAINST EACH OTHER. LATERAL JOINTS SHOULD BE STAGGERED TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. CARE SHOULD BE EXERCISED TO ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE DRYING OF THE ROOTS (SEE FIGURE ABOVE).

4. ON SLOPES 3:1 OR GREATER, OR WHEREVER EROSION MAY BE A PROBLEM, SOD SHOULD BE LAID WITH STAGGERED JOINTS AND SECURED BY STAPLING OR OTHER APPROVED METHODS. SOD SHOULD BE INSTALLED WITH THE LENGTH PERPENDICULAR TO THE SLOPE (ON CONTOUR).

5. AS SODDING OF CLEARLY DEFINED AREAS IS COMPLETED, SOD SHOULD BE ROOTS, BRUSH, WIRE, GRADE STAKES AND OTHER OBJECTS THAT WOULD ROLLED OR TAMPED TO PROVIDE FIRM CONTACT BETWEEN ROOTS AND SOIL. 5. AFTER ROLLING, SOD SHOULD BE IRRIGATED TO A DEPTH SUFFICIENT THAT THE UNDERSIDE OF THE SOD PAD AND THE SOIL 4 INCHES BELOW THE SOD IS

> 7. UNTIL SUCH TIME A GOOD ROOT SYSTEM BECOMES DEVELOPED, IN THE ABSENCE OF ADEQUATE RAINFALL, WATERING SHOULD BE PERFORMED AS OFTEN AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF AT LEAST 4

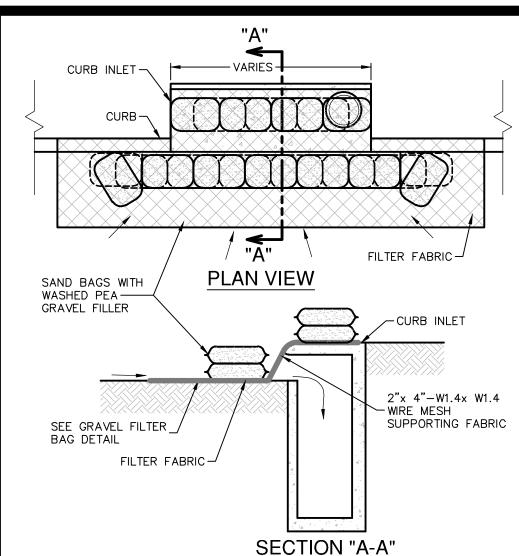
8. THE FIRST MOWING SHOULD NOT BE ATTEMPTED UNTIL THE SOD IS FIRMLY ROOTED, USUALLY 2-3 WEEKS. NOT MORE THAN ONE THIRD OF THE GRASS LEAF SHOULD BE REMOVED AT ANY ONE CUTTING.

#### INSPECTION AND MAINTENANCE GUIDELINES 1. SOD SHOULD BE INSPECTED WEEKLY AND AFTER EACH RAIN EVENT TO LOCATE AND REPAIR ANY DAMAGE.

DAMAGE FROM STORMS OR NORMAL CONSTRUCTION ACTIVITIES SUCH AS TIRE RUTS OR DISTURBANCE OF SWALE STABILIZATION SHOULD BE REPAIRED AS SOON AS PRACTICAL.

## SOD INSTALLATION DETAIL

NOT-TO-SCALE



## **GENERAL NOTES**

CONTRACTOR TO INSTALL 2"x4"-W1.4xW1.4 WIRE MESH SUPPORTING FILTER FABRIC OVER THE INLET OPENING. FABRIC MUST BE SECURED TO WIRE BACKING WITH CLIPS OR WIRE TIES AT THIS LOCATION. SAND BAGS FILLED WITH WASHED PEA GRAVEL SHOULD BE PLACED ON TOP OF WIRE MESH ON TOP OF THE INLET AS SHOWN ON THIS DETAIL TO HOLD WIRE MESH IN PLACE. SANDBAGS FILLED WITH WASHED PEA GRAVEL SHOULD ALSO BE PLACED ALONG THE GUTTER AS SHOWN ON THIS DETAIL TO HOLD WIRE MESH IN PLACE. SAND BAGS TO BE STACKED TO FORM A CONTINUOUS BARRIER AROUND INLETS.

2. THE BAGS SHOULD BE TIGHTLY ABUTTED AGAINST EACH OTHER TO PREVENT RUNOFF FROM FLOWING BETWEEN THE BAGS.

INSPECTION AND MAINTENANCE GUIDELINES 1. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED BY THE

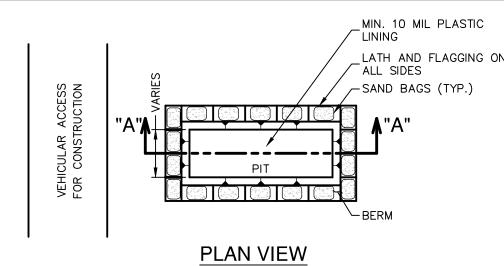
2. REMOVE SEDIMENT WHEN BUILDUP REACHES A DEPTH OF 3 INCHES. REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.

3. CHECK PLACEMENT OF DEVICE TO PREVENT GAPS BETWEEN DEVICE AND

4. INSPECT FILTER FABRIC AND PATCH OR REPLACE IF TORN OR MISSING. 5. STRUCTURES SHOULD BE REMOVED AND THE AREA STABILIZED ONLY AFTER THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

# **BAGGED GRAVEL CURB INLET**

PROTECTION DETAIL NOT-TO-SCALE



# MIN. 10 MIL PLASTIC SAND BAGS (TYP.) -SAND BAGS (TYP.)

## SECTION "A-A'

## **GENERAL NOTES**

. DETAIL ABOVE ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE. WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO

CONSTRUCTION TRAFFIC. WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF.

4. LOCATE WASHOUT AREA AT LEAST 50 FEET FROM SENSITIVE FEATURES, STORM DRAINS, OPEN DITCHES OR WATER BODIES. TEMPORARY CONCRETE WASHOUT FACILITY SHOULD BE CONSTRUCTED WITH

SUFFICIENT QUANTITY AND VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.

## **MATERIALS**

PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL IN POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

## **MAINTENANCE**

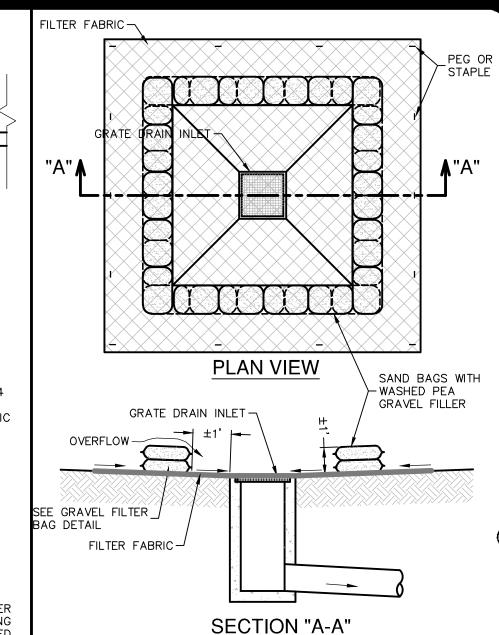
WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE SHOULD BE REMOVED AND DISPOSED OF. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT

FACILITIES SHOULD BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED

3. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCES CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE BACKFILLED AND REPAIRED.

## CONCRETE TRUCK WASHOUT

PIT DETAIL NOT-TO-SCALE



**GENERAL NOTES** . THE SANDBAGS SHOULD BE FILLED WITH WASHED PEA GRAVEL AND STACKED TO FORM A CONTINUOUS BARRIER ABOUT 1 FOOT HIGH AROUND

2. THE BAGS SHOULD BE TIGHTLY ABUTTED AGAINST EACH OTHER TO PREVENT RUNOFF FROM FLOWING BETWEEN THE BAGS.

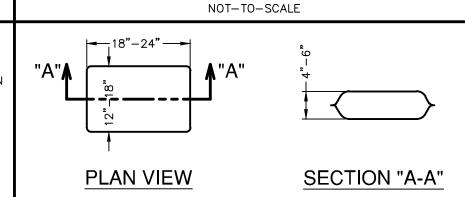
INSPECTION AND MAINTENANCE GUIDELINES . INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFAL REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.

2. REMOVE SEDIMENT WHEN BUILDUP REACHES A DEPTH OF 3 INCHES. REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MATTER THAT IT WILL NOT ERODE.

3. CHECK PLACEMENT OF DEVICE TO PREVENT GAPS BETWEEN DEVICE 4. INSPECT FILTER FABRIC AND PATCH OR REPLACE IF TORN OR

5. STRUCTURES SHOULD BE REMOVED AND THE AREA STABILIZED ONLY AFTER THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

## BAGGED GRAVEL GRATE INLET PROTECTION DETAIL



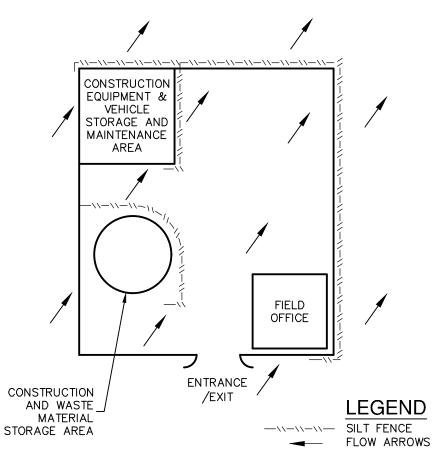
THE FILTER BAG MATERIAL SHALL BE MADE OF POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN FABRIC, MIN. UNIT WEIGHT OF 4 OUNCES/SY, HAVE A MULLEN BURST STRENGTH EXCEEDING 300 PSI AND ULTRAVIOLET STABILITY EXCEEDING 70%.

THE FILTER BAG SHALL BE FILLED WITH CLEAN, MEDIUM WASHED PEA GRAVEL TO COARSE GRAVEL (0.31 TO 0.75 INCH DIAMETER).

. SAND SHALL <u>NOT</u> BE USED TO FILL THE FILTER BAGS.

# GRAVEL FILTER BAG DETAIL

NOT-TO-SCALE



# **CONSTRUCTION STAGING AREA**

NOT-TO-SCALE

THE ENGINEERING SEAL HAS BEEN AFFIXED TO THIS SHEET ONLY FOR THE PURPOSE OF DEMONSTRATING COMPLIANCE WITH THE TPDES-STORM WATER POLLUTION PREVENTION PLAN (SWP3) REGULATIONS.

THIS SHEET HAS BEEN PREPARED FOR PURPOSES OF THE SWP3 ONLY. ALL OTHER CIVIL ENGINEERING RELATED INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE SHEET IN THE CIVIL IMPROVEMENT PLANS.

ESIGNER ES/JV HECKED TK DRAWN ES/ C0.30

13397-00

APRIL 2024

 $\geq$ 

06/07/20

(V

THOMAS MATTHEW CARTE

79272

CASE. NO 2024-XX-SDP

MATERIALS

OF 36 HOURS.

SHOOT GROWTH AND THATCH.

SITE PREPARATION

(± 1/4" INCH) AT THE TIME OF CUTTING. THIS THICKNESS SHOULD EXCLUDE

2. PIECES OF SOD SHOULD BE CUT TO THE SUPPLIER'S STANDARD WIDTH AND

LENGTH, WITH A MAXIMUM ALLOWABLE DEVIATION IN ANY DIMENSION OF 5%.

3. STANDARD SIZE SECTIONS OF SOD SHOULD BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN

4. SOD SHOULD BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD

. PRIOR TO SOIL PREPARATION, AREAS TO BE SODDED SHOULD BE BROUGHT

2. THE SURFACE SHOULD BE CLEARED OF ALL TRASH, DEBRIS AND OF ALL

3. FERTILIZE ACCORDING TO SOIL TESTS. FERTILIZER NEEDS CAN BE

DETERMINED BY A SOIL TESTING LABORATORY OR REGIONAL RECOMMENDATIONS

CAN BE MADE BY COUNTY AGRICULTURAL EXTENSION AGENTS. FERTILIZER

SHOULD BE WORKED INTO THE SOIL TO A DEPTH OF 3 INCHES WITH A DISC,

FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE CONTOUR.

SPRINGTOOTH HARROW OR OTHER SUITABLE EQUIPMENT. ON SLOPING LAND, THE

1. SOD STRIPS IN WATERWAYS SHOULD BE LAID PERPENDICULAR TO THE

DIRECTION OF FLOW. CARE SHOULD BE TAKEN TO BUTT ENDS OF STRIPS

2. AFTER ROLLING OR TAMPING, SOD SHOULD BE PEGGED OR STAPLED TO

RESIST WASHOUT DURING THE ESTABLISHMENT PERIOD. MESH OR OTHER

NETTING MAY BE PEGGED OVER THE SOD FOR EXTRA PROTECTION IN CRITICAL

TORN OR UNEVEN PADS SHOULD NOT BE ACCEPTABLE.

SUSPENDED FROM A FIRM GRASP ON ONE END OF THE SECTION.

TO FINAL GRADE IN ACCORDANCE WITH THE APPROVED PLAN.

**INSTALLATION IN CHANNELS** 

TIGHTLY (SEE FIGURE ABOVE).

INTERFERE WITH PLANTING, FERTILIZING OR MAINTENANCE OPERATIONS.

#### GUIDELINES FOR DESIGN AND INSTALLATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROLS

TYPE OF STRUCTURE	REACH LENGTH	MAXIMUM DRAINAGE AREA	SLOPE
SILT FENCE	N/A	2 ACRES	0 - 10%
	200 FEET	2 ACRES	10 - 20%
	100 FEET	1 ACRE	20 - 30%
	50 FEET	1/2 ACRE	> 30%
TRIANGLE FILTER DIKE	100 FEET	1/2 ACRE	< 30% SLOPE
	50 FEET	1/4 ACRE	> 30% SLOPE
ROCK BERM *, **	500 FEET	< 5 ACRES	0 - 10%

\* FOR ROCK BERM DESIGN WHERE PARAMETERS ARE OTHER THAN STATED, DRAINAGE AREA CALCULATIONS AND ROCK BERM DESIGN MUST BE SUBMITTED FOR REVIEW.

\*\* HIGH SERVICE ROCK BERMS MAY BE REQUIRED IN AREAS OF ENVIRONMENTAL SIGNIFICANCE AS DETERMINED BY THE CITY OF GEORGETOWN.

*The Architect/Engineer assumes* responsibility for appropriate

use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS TEMPORARY EROSION AND SEDIMENTATION CONTROL GUIDELINES NTS 1/2003

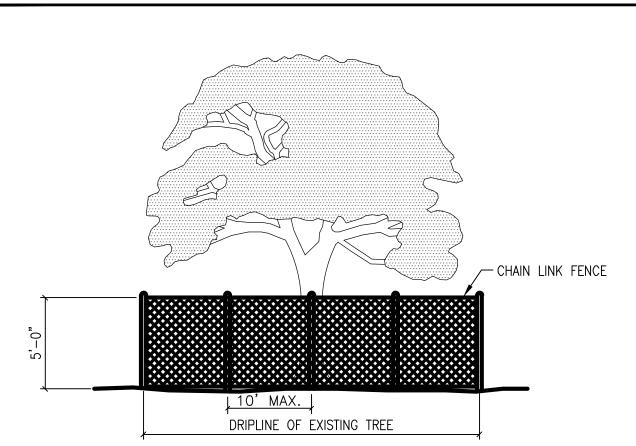
ADOPTED 6/21/2006

- NOTE: THIS SECTION IS INTENDED TO ASSIST THOSE PERSONS PREPARING WATER POLLUTION ABATEMENT PLANS (WPAP) OR STORM WATER POLLUTION PREVENTION PLANS (SW3P) THAT COMPLY WITH FEDERAL, STATE AND/OR LOCAL STORM
- 1. THE CONTRACTOR TO INSTALL AND MAINTAIN EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FFNCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING, GRADING, OR EXCAVATION). CONTRACTOR TO REMOVE EROSION/SEDIMENTATION CONTROLS AT THE COMPLÉTION OF PROJECT AND GRASS RESTORATION.
- 2. ALL PROJECTS WITHIN THE RECHARGE ZONE OF THE EDWARD'S AQUIFER SHALL SUBMIT A BEST MANAGEMENT PRACTICES AND WATER POLLUTION AND ABATEMENT PLAN TO THE TNRCC FOR APPROVAL PRIOR TO ANY CONSTRUCTION. 3. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS TO BE IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN AND WATER POLLUTION ABATEMENT PLAN. DEVIATIONS FROM THE APPROVED PLAN MUST BE SUBMITTED TO AND APPROVED BY THE OWNER'S REPRESENTATIVE.
- 4. ALL PLANTING SHALL BE DONE BETWEEN MAY 1 AND SEPTEMBER 15 EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING. IF PLANTING IS AUTHORIZED TO BE DONE OUTSIDE THE DATES SPECIFIED, THE SEED SHALL BE PLANTED WITH THE ADDITION OF WINTER FESCUE (KENTUCKY 31) AT A RATE OF 1001b/ACRE. GRASS SHALL BE COMMON BERMUDA GRASS, HULLED, MINIMUM 82% PURE LIVE SEED. ALL GRASS SEED SHALL BE FREE FROM NOXIOUS WEED, GRADE "A" RECENT CROP, RECLEANED AND TREATED WITH APPROPRIATE FUNGICIDE AT TIME OF MIXING. SEED SHALL BE FURNISHED IN SEALED, STANDARD CONTAINERS WITH DEALER'S GUARANTEED ANALYSIS.
- 5. ALL DISTURBED AREAS TO BE RESTORED AS NOTED IN THE WATER POLLUTION ABATEMENT PLAN.
- 6. THE PLANTED AREA TO BE IRRIGATED OR SPRINKLED IN A MANNER THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF FOUR (4) INCHES. THE IRRIGATION TO OCCUR AT 10-DAY INTERVALS DURING THE FIRST TWO MONTHS TO INSURE GERMINATION AND ESTABLISHMENT OF THE GRASS . RAINFALL
- OCCURRENCES OF 1/2 INCH OR GREATER TO POSTPONE THE WATERING SCHEDULE ONE WEEK. 7. RESTORATION TO BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1-1/2 INCHES HIGH WITH 95# CONSTITUTE. PROVIDED NO BARE SPOTS LARGER THAN 25 SQUARE FEET EXIST.
- 8. A MINIMUM OF FOUR (4) INCHES OF TOPSOIL TO BE PLACED IN ALL AREAS DISTURBED BY CONSTRUCTION. 9. THE CONTRACTOR TO HYDROMULCH OR SOD (AS SHOWN ON PLANS) ALL EXPOSED CUTS AND FILLS UPON COMPLETION OF CONSTRUCTION.
- 10. EROSION AND SEDIMENTATION CONTROLS TO BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILDUP WITHIN TREE DRIPLINE.
- 11. TO AVOID SOIL COMPACTION, CONTRACTOR SHALL NOT ALLOW VEHICULAR TRAFFIC, PARKING, OR STORAGE OF EQUIPMENT OR MATERIALS IN THE TREE DRIPLINE AREAS.
- 12. WHERE A FENCE IS CLOSER THAN FOUR (4) FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED-ON PLANKING TO A HEIGHT OF EIGHT (8) FEET (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE FENCING. 13. TREES TO BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
- 14. ANY ROOT EXPOSED BY CONSTRUCTION ACTIVITY TO BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOPSOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN TWO DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LÓSS
- 15. CONTRACTOR TO PRUNE VEGETATION TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND EQUIPMENT BEFORE DAMAGE OCCURS (RIPPING OF BRANCHES, ETC.). ALL FINISHED PRUNING TO BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE "NATIONAL ARBORIST ASSOCIATION PRUNING
- STANDARDS FOR SHADE TREES"). 16. THE CONTRACTOR IS TO INSPECT THE CONTROLS AT WEEKLY INTERVALS AND AFTER EVERY RAINFALL EXCEEDING 1/4 INCH TO VERIFY THAT THEY HAVE NOT BEEN SIGNIFICANTLY DISTURBED. ANY ACCUMULATED SEDIMENT AFTER A SIGNIFICANT RAINFALL TO BE REMOVED AND PLACED IN THE OWNER DESIGNATED SPOIL DISPOSAL SITE. THE CONTRACTOR
- O CONDUCT PERIODIC INSPECTIONS OF ALL EROSION/SEDIMENTATION CONTROLS AND TO MAKE ANY REPAIRS OR MODIFICATIONS NECESSARY TO ASSURE CONTINUED EFFECTIVE OPERATION OF EACH DEVICE. 17. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT IMMEDIATELY ADJACENT TO A PROTECTED TREE, ERECT THE FENCE APPROXIMATELY TWO TO FOUR
- FEET (2'-4') BEHIND THE AREA IN QUESTION. 18. NO ABOVE AND/OR BELOW GROUND TEMPORARY FUEL STORAGE FACILITIES TO BE STORED ON THE PROJECT SITE.
- 19. IF EROSION AND SEDIMENTATION CONTROL SYSTEMS ARE EXISTING FROM PRIOR CONTRACTS, OWNER'S REPRESENTATIVE AND THE CONTRACTOR TO EXAMINE THE EXISTING EROSION AND SEDIMENTÁTION CONTROL SYSTEMS FOR DAMAGE PRIOR TO CONSTRUCTION. ANY DAMAGE TO PREEXISTING EROSION AND SEDIMENTATION CONTROLS NOTED TO BE REPAIRED AT OWNERS EXPENSE.
- 20. INTENTIONAL RELEASE OF VEHICLE OR EQUIPMENT FLUIDS ONTO THE GROUND IS NOT ALLOWED. CONTAMINATED SOIL RESULTING FROM ACCIDENTAL SPILL TO BE REMOVED AND DISPOSED OF PROPERLY.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

REVISION NOTE: ADOPTED 6/21/2006

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS EROSION AND SEDIMENTATION AND TREE PROTECTION NOTES NTS 1/2003 APPROVED BY: TRB



### NOTES:

- 1. TREE PROTECTION FENCES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR GRADING).
- 2. FENCES SHALL COMPLETELY SURROUND THE TREE, OR CLUSTERS OF TREES; WILL BE LOCATED AT THE OUTERMOST LIMIT OF THE TREE BRANCHES (DRIPLINE), AND WILL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROJECT IN ORDER TO PREVENT THE FOLLOWING:
- A. SOIL COMPACTION IN THE ROOT ZONE AREA RESULTING FROM VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT OR MATERIALS.
- B. ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN SIX INCHES (6") CUT OR FILL, OR TRENCHING NOT REVIEWED AND AUTHORIZED BY THE CITY.
- C. WOUNDS TO EXPOSED ROOTS, TRUNKS OR LIMBS BY MECHANICAL EQUIPMENT. D. OTHER ACTIVITIES DETRIMENTAL TO TREES, SUCH AS CHEMICAL STORAGE, CEMENT TRUCK CLEANING
- AND FIRE.
- 3. EXCEPTIONS TO INSTALLING FENCES AT TREE DRIPLINES MAY BE PERMITTED IN THE FOLLOWING CASES: A. WHERE PERMEABLE PAVING IS TO BE INSTALLED, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA.
- B. WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE NO CLOSER THAN SIX FEET (6'-0") TO BUILDING.

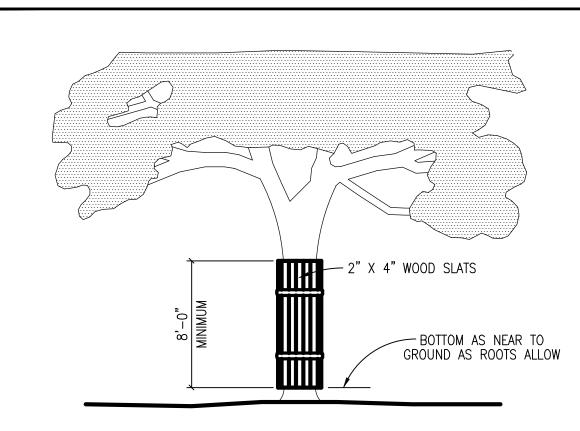
The Architect/Engineer assumes responsibility for appropriate

use of this standard.

REVISION NOTE: ADOPTED 6/21/2006 CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS TREE PROTECTION -CHAIN LINK FENCE NTS 1/2003 DRAWN BY: APPROVED BY:

MRS TRB

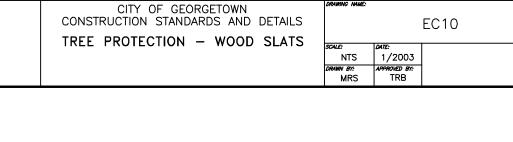
EC09

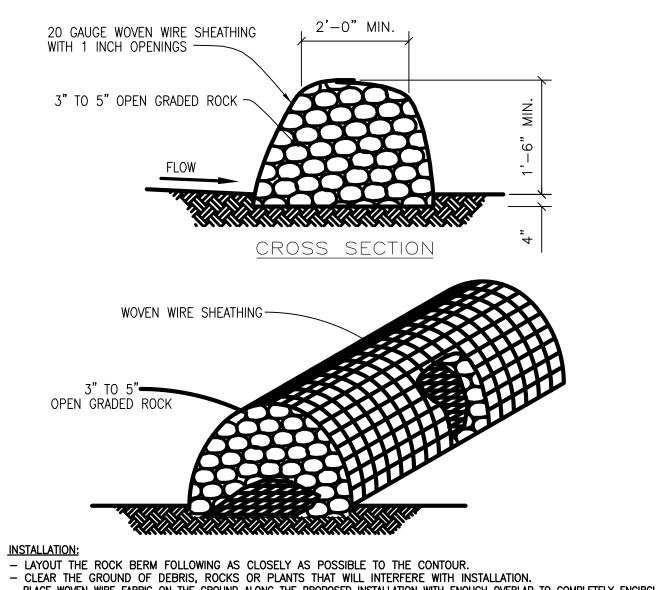


- WHERE ANY EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN FOUR FEET (4'-0") TO A TREE TRUNK; PROTECT THE TRUNK WITH STRAPPED-ON-PLANKING TO A HEIGHT OF EIGHT FEÈT (8'-0"), OR TO THE LIMITS OF LOWER BRANCHING IN ADDITION TO THE REDUCED FENCING PROVIDED.
- ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOP SOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN TWO (2) DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE, AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
- PRIOR EXCAVATION OR GRADE CUTTING WITHIN TREE DRIPLINE. MAKE A CLEAN CUT BETWEEN THE DISTURBED AND UNDISTURBED ROOT ZONES WITH A ROCK SAW OR SIMILAR EQUIPMENT, TO MINIMIZE DAMAGE TO
- 1. TREES MOST HEAVILY IMPACTED BY CONSTRUCTION ACTIVITIES SHOULD BE WATERED DEEPLY ONCE A WEEK DURING PERIODS OF HOT, DRY WEATHER. TREE CROWNS SHOULD BE SPRAYED WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON THE LEAVES.
- ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.
- 6. NO LANDSCAPE TOPSOIL DRESSING GREATER THE FOUR INCHES (4") SHALL BE PERMITTED WITHIN THE DRIPLINE OF A TREE. NO SOIL IS PERMITTED ON THE ROOT FLARE OF ANY TREE.
- PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC AND EQUIPMENT SHALL TAKE PLACE BEFORE CONSTRUCTION BEGINS.

*The Architect/Engineer assumes* responsibility for appropriate

use of this standard. ADOPTED 6/21/2006 CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS TREE PROTECTION - WOOD SLATS





- PLACE WOVEN WIRE FABRIC ON THE GROUND ALONG THE PROPOSED INSTALLATION WITH ENOUGH OVERLAP TO COMPLETELY ENCIRCLE
  THE FINISHED SIZE OF THE BERM.
   PLACE THE ROCK ALONG THE CENTER OF THE WIRE TO THE DESIGNATED HEIGHT.
- WRAP THE STRUCTURE WITH THE PREVIOUSLY PLACED WIRE MESH SECURE ENOUGH SO THAT WHEN WALKED ACROSS THE STRUCTURE RETAINS IT'S SHAPE. - Secure with tie wire
- THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROX. 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.
- THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

## INSPECTION AND MAINTENANCE GUIDELINES:

- Inspection should be made weekly and after each rainfall event by the responsible party. For installations in STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED
- REPAIR ANY LOOSE WIRE SHEATHING. - THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
  - THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE

ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.

responsibility for appropriate use of this standard

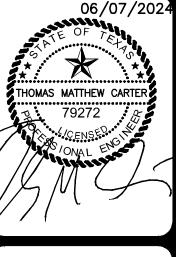
GEORGETOWN

*The Architect/Engineer assumes* 

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS ROCK BERM DETAIL

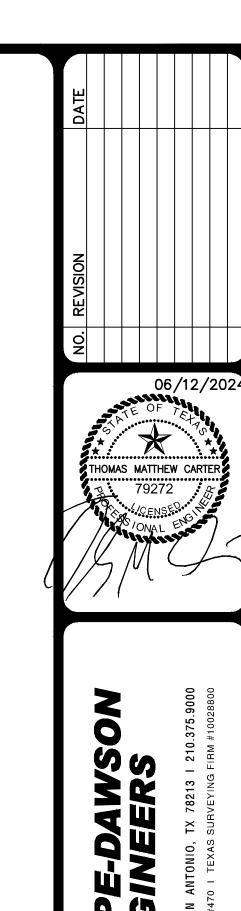
ADOPTED 6/21/2006

06/07/20



(S

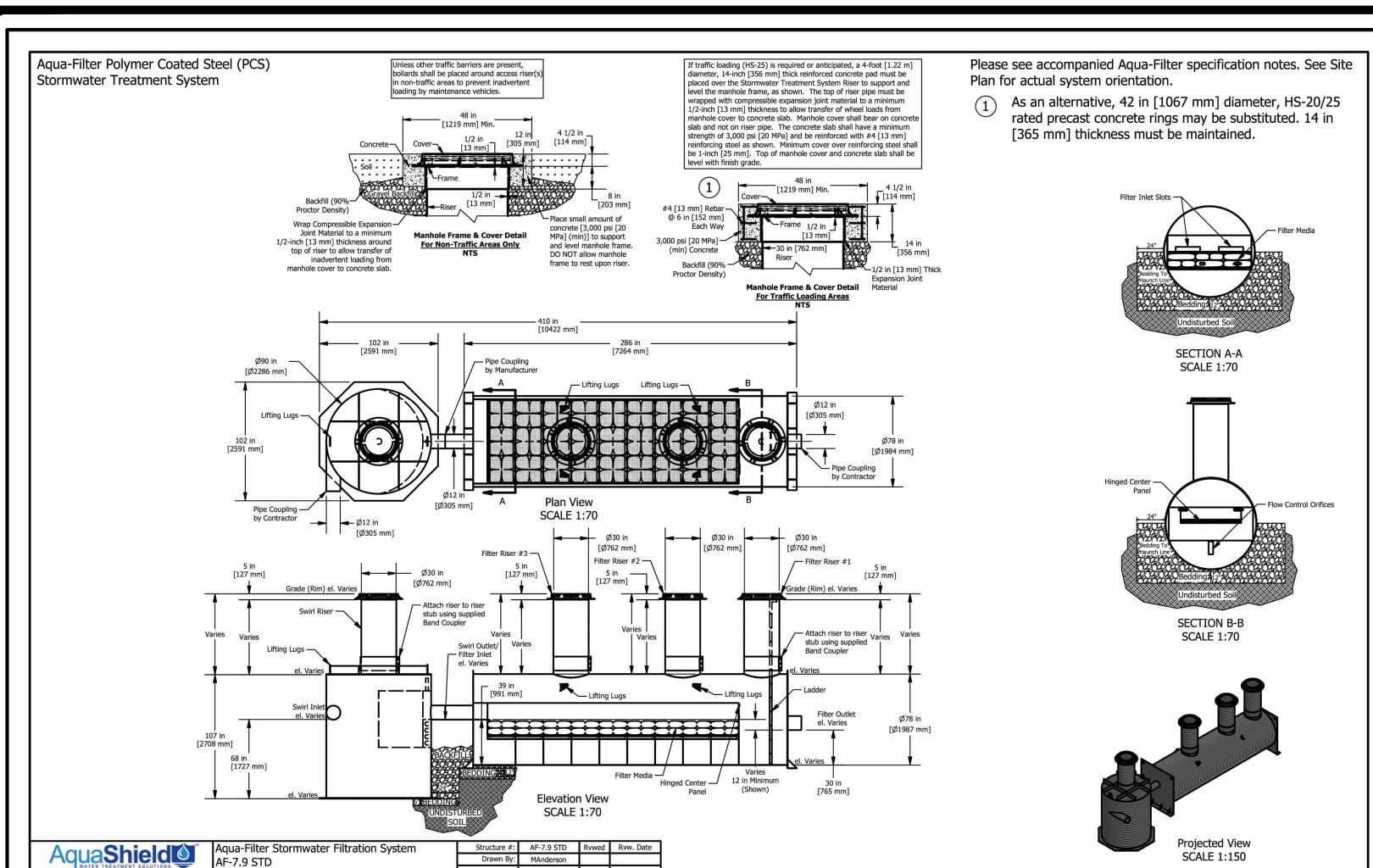
 $\geq$ 



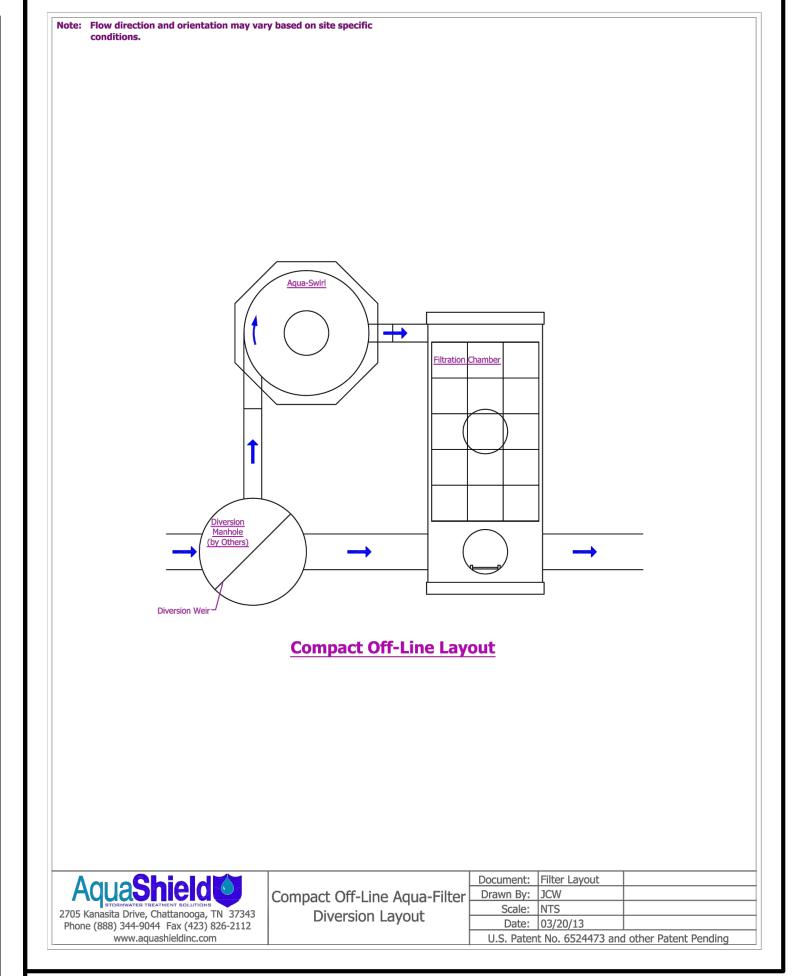
NMOL GEORGE TEXAS EVERHOME SUITES - GEORGETOWN,

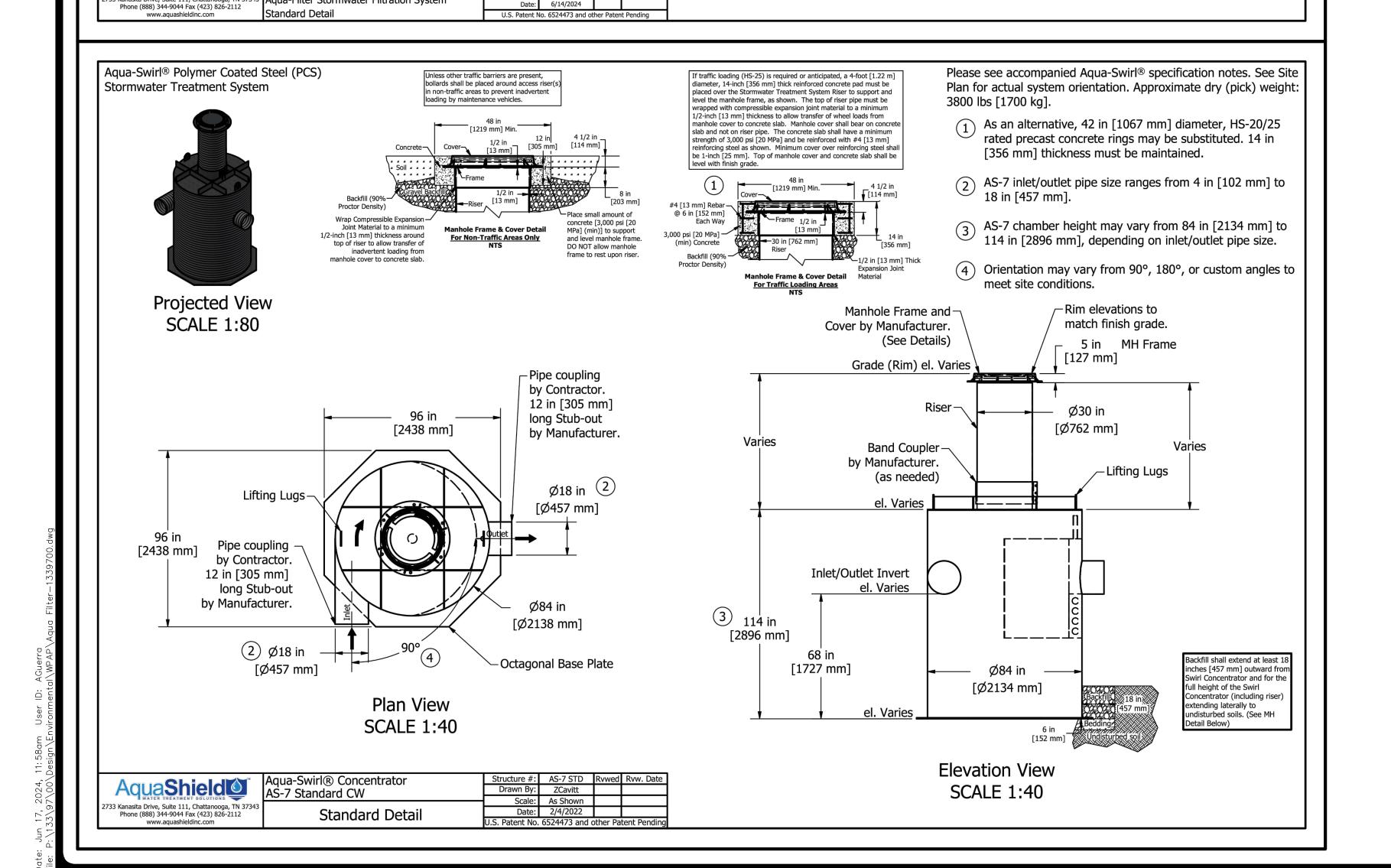
POLLUTION ABATEMENT AQUA FILTER DETAIL

JOB NO. 13397-00 APRIL 2024 DESIGNER ES/JV CHECKED TK DRAWN ES/ C0.32



33 Kanasita Drive, Suite 111, Chattanooga, TN 37343 Aqua-Filter Stormwater Filtration System





CASE. NO 2024-XX-SDP

PERMIT SET